

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
<b>General Project Information (PSS Section 1.3, 1.4, 1.5 / Application Exhibits 2 and 3)</b>				
1	Isselhard, A.	1.1	Commenter requests information on make and model of turbine for the Project.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time an Application is submitted. Prior to performing portions of studies and final reports for the Certificate Application, Lighthouse Wind will incorporate an assumed turbine model.
1	Isselhard, A.	1.2	Commenter requests information on the turbine specifications including sound rating, hub height and overall height.	Lighthouse Wind has not yet selected a turbine manufacturer or model; therefore turbine specifications are currently unknown. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the turbine models under consideration, including the largest one, if one has not been selected at the time an Application is submitted.
1	Isselhard, A.	1.3	Commenter asks how many turbines will be sited and where will they be sited.	The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the turbine models under consideration, including the largest one, if one has not been selected at the time an Application is submitted. Lighthouse Wind has provided a figure as Appendix C to this comment response document presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site. This figure shows all of the possible places that could support wind turbines. Final siting of the turbines will be based upon the studies performed according to the PSS and the stipulation process.
7	Smith, A.	7.1	Commenter asks that Lighthouse Wind provide the specific location, size and number of turbines.	The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the turbine models under consideration, including the largest one, if one has not been selected at the time an Application is submitted. Lighthouse Wind has provided a figure as Appendix C to this comment response document presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site. This figure shows all of the possible places that could support wind turbines. Final siting of the turbines will be based upon the studies performed according to the PSS and the stipulation process.
7	Smith, A.	7.2	Commenter describes current visual character at their property and expresses displeasure for negative visual changes from the turbines.	Comment noted and appreciated. Potential visual impacts due to the construction and operation of the Project will be assessed in Exhibit 24 of the Certificate Application.
8	Smith, D.	8.4	Commenter asks that Lighthouse Wind provide the specific location, size and number of turbines. Commenter questions if Lighthouse Wind is keeping this information secret.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure as Appendix C to this comment response document presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site.
11	Simon, J. (Town of Yates Supervisor-Elect)	11.1	Commenter believes PSS lacks the necessary details for public to formulate recommendations with regard to the methodologies, scope and duration of impact studies. Commenter also suggests that PSS does not provide the public enough information about the specific location, size, number, type, or generating capacity of the wind turbines to be used in the Project.	Lighthouse Wind appreciates the comments from the Town. Methodologies, scope and duration of studies included in the PSS will not change based on the turbine model ultimately chosen by Lighthouse Wind. However, a figure presenting potential buildable area for wind turbines based on a current, preliminary understanding of environmental and regulation constraints within the entire Project site is being provided as Appendix C to this comment response document.
13	Markey, S.	13.1	Commenter requests explanations as to how after two years of study and planning so little is known about Project scope (layout and design of the Project and description of temporary and permanent impacts to environment).	The majority of the studies which are included in the PSS have not been initiated. In addition, a Project layout and design has not yet been completed and a turbine manufacturer and model has not yet been selected, which will affect the number and location of turbines for the Project. The PSS document does not include an assessment of potential impacts. Potential temporary and permanent impacts to the environment will be presented in the Certificate Application.
17	Sokolow, A.	17.1	Commenter makes general inquiries about Project size and scale of Project. Commenter notes that Lighthouse Wind has not acquired all required leases for land to be used and that PSS is missing specific required information including details on design of turbines, layout, and manufacturer of turbines. Notes PSS is missing details for Decommissioning, Alternatives. Commenter suggests that wind data is not complete and viability of Project has not been determined (wind resource may be insufficient). Commenter requests that since specific size of turbines hasn't been selected that largest possible size (3.3 MW) should be used in determination of setting safe setbacks.	Lighthouse Wind has not defined a Project layout nor has a turbine manufacturer and model been selected to date, which will affect the number and location of turbines for the Project. The intent of the PSS document is not to include an assessment of potential impacts. Potential temporary and permanent impacts to the environment will be presented in the Certificate Application. In addition, as stated in Section 1.2 of the PSS, Exhibit 29 Site Restoration and Decommissioning is not an Exhibit that requires scoping (inclusion in the PSS). Section 2.15 addresses the scope of the alternatives analysis that is required by the Article 10 regulations and will be included as Exhibit 9 of the Certificate Application.

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17	Sokolow, A.	17.7	Commenter requests details on how the Project will comply with both the RPS and REV. Commenter also asks where RECs will be sold. Commenter continues that if the Project proceeds under the REV, why haven't municipalities been involved with the micro grid configuration and what direct benefit will the municipalities be receiving under the constructs of the REV. Commenter ask if the Project will receive funds from the Green Bank.	Much of this information was stated in the PSS, Section 1.5, Project Purpose, Need and Benefit, and updated information on this will be supplied in the Application. In September of 2004, the New York State Public Service Commission issued an Order adopting an RPS, with a goal of increasing the proportion of renewable energy used by New York consumers from the then-current 19.3 percent to at least 25 percent by the end of 2013. In January 2010 the RPS goal was increased, and the goal for the proportion of renewable energy used by New York consumers for renewable resources was revised from 25% to 30% and the term for attaining the program goal was extended to 2015. The RPS has been extended to include another solicitation in 2016, but is expected to be replaced by the Clean Energy Standard as part of the Reforming the Energy Vision (REV) proceeding. The details of this proceeding and any resulting programs or legislation are pending. The State Energy Plan goal put forth last year was to achieve 50% renewables by 2030. It is anticipated that Lighthouse Wind will either participate in one of the last solicitations in the current RPS or in the final program of the CES. If Lighthouse Wind participates in the final offering of the RPS, it would competitively bid into the solicitation for Renewable Energy Credits (RECs). REV is a broad reformation of the current energy infrastructure in the State of New York. It does not necessarily rely only on the creation of microgrids. Pending finalization of the goals, programs, and statutes, Lighthouse Wind plans to comply with REV by contributing to the REV target of 50% of all New York's energy being generated from renewable sources. The Project does not currently plan to obtain funding via the Green Bank, but due to uncertainty in how policy will be formed for future programs, this cannot be ruled out. If RPS and REV policies are completed at time of Application, Lighthouse Wind will include additional information in the Application as to how it may participate in New York State programs.
17	Sokolow, A.	17.8	Commenter cites the NYISO Interconnection Queue of 2014; Lighthouse Wind was shown as connecting to NM-NG. Commenter asks for an explanation that in the 2015 queue it is shown as NYSEG.	The interconnection application was filed for interconnection location at the Kintigh Substation which is a New York State Electric and Gas facility. In the earlier interconnection conversations, National Grid had been consulted as a potential affected party.
18	Orr, C.	18.1	Commenter makes general inquiries about specific location, Project size, and scale of Project and requests map showings specific locations of turbines. Commenter notes that affected sensitive receptors could not be identified without a Project map. Commenter also suggests that Shadow Flicker would need to be determined at proposed wind turbine locations and this can't be determined without a Project map. Commenter notes general disinterest in Project and does not think the Project fits the comprehensive plan of the Lake Ontario shoreline.	Lighthouse Wind has not defined a Project layout nor has a turbine manufacturer and model been selected to date, which will affect the number and location of turbines for the Project. The intent of the PSS document is not to include an assessment of potential impacts. A full assessment of the potential temporary and permanent impacts to the environment will be presented in the Certificate Application, including a Shadow Flicker Study based on a Project layout. To better understand the potential locations where turbines may be sited within the Project site, please see the attached figure.
21	Spitzer, D. (Attorney for Town of Yates)	21.1	Attorney for Town of Yates indicates Town reserves the right to comment on the PSS and post additional comments once it has retained a professional engineer to review field work conducted. Town requests several application exhibits that were not scoped in the PSS, including, but not limited to, exhibits pertaining to facility and turbine design, cost analyses, site restoration, decommissioning, and other public applications and filings. Requests that Lighthouse Wind provide further detail on type, number of turbines, or decides where turbines are located. Town requests a map of preliminary arrangement or arrangements(s) of facility components, including siting areas for turbines and other Project structures.	Comment noted. However, Lighthouse Wind would like to point out that the public comment period on the PSS has expired. The Town is encouraged to review, with the support of their engineer, the completed studies and complete Certificate Application during the Public Comment Period during the Application Phase. Lighthouse Wind reminds the Town that a Project layout has not been defined nor has a turbine manufacturer and model been selected to date, which will affect the number and location of turbines for the Project. The intent of the PSS document is not to include an assessment of potential impacts. A full assessment of the potential temporary and permanent impacts to the environment will be presented in the Certificate Application.
21	Spitzer, D. (Attorney for Town of Yates)	21.2	Commenter indicates that since it is anticipated that the Project will seek Renewable Energy Credits, a reference to such plans should be included in the PSS to insure that the Application is complete.	Lighthouse Wind is required to provide, in its Application, "a detailed estimate of the total capital costs of the proposed facility, including a separately stated estimate for each interconnection, broken down in a rational manner by the Applicant into major cost components appropriate to the facility," as well as the sources of information used to calculate costs. 16 NYCRR § 1001.14(a)-(c). Therefore, to the extent that Lighthouse Wind plans to seek out financial incentives, such as Renewable Portfolio Standard (RPS) funding or equivalent types of funding developed through the ongoing Renewed Energy Vision (REV) proceeding, or via state or federal renewable energy credits, which would affect the overall cost of the Project, that information would be discussed in the Application at Exhibit 14 (Cost of the Facility).
21	Spitzer, D. (Attorney for Town of Yates)	21.8	Commenter requests that Lighthouse Wind references the applications necessary to create PILOT benefits described in the PSS (and tax breaks essential to Project's financial viability).	In its Article 10 Application, as part of Exhibit 27 (Socioeconomic Effects), Lighthouse Wind will identify taxing jurisdictions within which the Project would be located, and "any entity from which payments in lieu of taxes will or may be negotiated." 16 NYCRR § 1001.27(h). Further, Lighthouse Wind must provide, "for each jurisdiction, an estimate of the incremental amount of annual taxes (and payments in lieu of taxes, benefit charges and user charges) it is projected would be levied against the post-construction facility site, its improvements and appurtenances," and "For each jurisdiction, a comparison of the fiscal costs to the jurisdiction that are expected to result from the construction and operation of the facility to the expected tax revenues (and payments in lieu of taxes, benefit charge revenues and user charge revenues) generated by the facility." 16 NYCRR § 1001.27(i)-(j). If, at the time of the Application, a tentative plan for any PILOT agreement is being negotiated, the relevant materials and information related to that proposed PILOT will be included along with the Application.

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21	Spitzer, D. (Attorney for Town of Yates)	21.13	Commenter notes that until specifics regarding the design and layout of the Project are known, the Town of Yates will be unable to determine whether it would support or oppose the issuance of zoning approvals and/or variances to the Wind Energy Overlay Zone (zoning law). Commenter indicates that the Town requests that Lighthouse Wind examine alternatives to the current proposal that might bring it into compliance with applicable rules and regulations. The Town also requests that the PSS state how Lighthouse Wind will address the potential conflicts and seek to obtain Town endorsement of any deviations from the respective ordinances. The Town believes litigation can be avoided if a clear process for Town review of the requested deviations is established, perhaps by stipulation among the parties. The Town is prepared to meet with Lighthouse Wind and Siting Board staff to discuss this issue.	To the extent that this comment seeks to have the PSS amended, these comments were made prior to the January 21, 2016 decision of the presiding examiners denying motions to strike or require amendment of the PSS. That issue has since been resolved, and no further response is needed. As to the remainder of the comment, Lighthouse Wind notes that, although design and layout of the Project are not yet known, a figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints is being provided as Appendix C to this comment response document. The Project design and layout will be reviewed and modified to the maximum extent in order to comply with local laws and ordinances. As stated in the PSS Section 5, Lighthouse Wind anticipates being able to design a project which complies with the substance of many existing local regulations. Where such compliance is impossible, Lighthouse Wind would need to seek a waiver from the Siting Board, where it would have to show that a local substantive provision is unreasonably burdensome. Exhibit 31 of the Application will address each applicable local law and ordinance and whether the Project would comply or provide reasoning for why a waiver is being sought and will address property values through a literature review of studies that have evaluated such potential impacts from wind farm projects.
22	Spitzer, D. (Attorney for Town of Yates)	22.1	The Commenter, on the behalf of the Town of Yates, provides comments on motions by the Town of Somerset to strike and requests Lighthouse Wind provide clarifications of procedures. The Commenter clarifies that the Town of Yates does not wish to strike the PSS from record but, believes the PSS should be supplemented with further details. Commenter notes that the Town requests that Lighthouse Wind file, or the siting board direct Lighthouse Wind to file, a supplement to the PSS providing: 1) the information required by 16 NYCRR § 1000.5(l)(7) as to "the Applicant's property rights and interests or those it proposes to acquire to all lands of the proposed facility, and 2) a proposed map of the Project area indicating a preliminary arrangement (or arrangements) of facility components, including potential siting areas for turbines and other Project structures.  Remainder of this Comment letter uses similar statements and questions from the previous Town of Yates letter (Comment Letter 21).	As stated in the PSS, Lighthouse Wind currently has no land holdings and, therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components, whether temporary or permanent. These leases have been and continue to be recorded publicly with the County Clerk as they are entered into with local landowners. At this time, Lighthouse does not intend to purchase significant property for this Project, nor does Lighthouse Wind have the authority to take property via eminent domain, or any intention of seeking such authority in order to construct this Project. The specific location of Project components will be provided in the Application.  Lighthouse Wind continues to work through its required studies and stakeholder outreach, and to utilize the information gleaned to refine the Project layout, based on constraints at this location. A figure presenting potential buildable area for wind turbines based on a current, preliminary understanding of environmental and regulatory constraints is being provided as Appendix C to this comment response document for identification of potential areas where Lighthouse Wind will consider securing easements or leases with private landowners for placement of turbines. Location of other Project components is currently unknown, but additional information will be available by the time of Application.
25	Hoffman, J.	25.2	Commenter refers to Article 10 Paragraph 1001.4 Land Use specifically requiring "For wind power facilities, a map of all properties upon which any component of the major electric generating facility or the related facilities would be located, and all properties within 2000 feet of such properties that shows the current land use, tax parcel number and owner of record of each property, and any publically known proposed land use plans for any of these parcels." Commenter notes that a map was not included as part of the PSS. Commenter asks "Why the secrecy?" Commenter indicates that studies and analyses on the potential impact to the community cannot be conducted when the number, size, height and location of the wind turbines is not disclosed. Commenter suggests that the public is being denied the information necessary to fully judge the impact this industrial Project will have on our rural farming community.	Lighthouse Wind would like to clarify that there is no requirement to provide a Project Layout within the PSS in the Article 10 regulations, as confirmed by the Hearing Examiners in their January 21, 2016 ruling on this issue. The provision cited by commenter, 16 NYCRR § 1001.4, specifically refers to Application requirements, and not the required components of a PSS. As stated in the PSS, Lighthouse Wind currently has no land holdings and therefore will secure easements or leases with private landowners to obtain the rights to place all Project components, whether temporary or permanent. These leases have been and continue to be recorded publicly with the County Clerk as they are entered into with local landowners. The specific location of Project components will be provided in the Application. Lighthouse Wind continues to work through its required studies and stakeholder outreach, and to utilize the information gleaned to refine the Project layout, based on constraints at this location. A figure presenting potential buildable area for wind turbines based on a current, preliminary understanding of environmental and regulatory constraints is being provided as Appendix C to this comment response document for identification of potential areas where Lighthouse Wind will consider securing easements or leases with private landowners for placement of turbines. Location of other Project components is currently unknown, but additional information will be available by the time of Application.
37	Crafts, C.	37.1	Commenter finds that the engineering proposal for the Niagara-Orleans County industrial wind turbine project to be lacking in credible outside review. Commenter requests that Lighthouse Wind provide an independent review of the "engineering goodness" of the proposed Project. Commenter suggests that in a free market, the cost benefit ratio would determine whether the Project went forward but, according to the Commenter, because the Project is "subsidized", that measure is not available.  Commenter requests that Project be reviewed by USDOE experts from the current Wind Power research effort, as part of the PSS Article 10 process. Commenter suggests using the NREL in Colorado. Commenter notes that if the proposed Project is to do its best for the National energy grid, then because the USDOE labs that model wind farms and test current wind technology hardware, outside New York State, would likely be an appropriate independent reviewer of Lighthouse Wind's selection of hardware and siting.	New York State has lawfully adopted the Article 10 certificate process to review the construction and operation of proposed wind power generation projects. Article 10 establishes a State Board to issue Certificates for the siting of Major Electric Generating Facilities. Involving a federal agency such as the USDOE or NREL as an independent reviewer goes beyond the scope and intent of the Article 10 regulations. With respect to subsidies and cost-benefit analysis, it is important to note that many energy sources in the U.S. receive subsidies in some form, and wind energy is certainly not unique in that regard. On both the State and Federal level, policymakers have determined the benefits associated with the generation of electricity from wind powered facilities, including benefits to public health and the environment as compared with the generation of electricity from fossil fuels and other energy sources, is important and must be encouraged and incentivized.

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37	Crafts, C.	37.8	Commenter inquires as to the "ultimate plans" for the area. Commenter claims that Lighthouse Wind's field agents are already renting land to the west in Newfane and to the east in Carlton.	Lighthouse Wind anticipates leasing lands for the Project in the Town of Somerset and the Town of Yates. Lighthouse Wind does not anticipate leasing any lands in the Towns of Newfane or Carlton. The commenter is misinformed.
37	Crafts, C.	37.10	Commenter inquires as to the selection of hardware: generator types, gear box type, tower construction materials, blade material type. Commenter states that these are choices that the local community will live with for the next thirty years. Commenter asks if the selected wind turbines going to be "quality materials or junk?"	Lighthouse Wind has not selected a turbine manufacturer or model to date. However, Lighthouse Wind is committed to using the most up to date wind turbine generator technology available. All turbine models considered will comply with applicable international and national standards and ratings. The Certificate Application will include details in regard to turbine maker and turbine specifications, as required by Exhibit 6 (Wind Power Facilities)
39	Saviola, M. (NYS Ag & Markets)	39.1	Commenter states that the PSL Article 10 Application should include a preferred Project description which includes all permanent and temporary ground disturbance activities. Commenter states that NYSAM is primarily concerned with temporary and permanent impacts to agricultural resources from the Project. Commenter asks that agricultural land uses be identified and designated accordingly regardless of a parcel's inclusion in an Agricultural District. Commenter states that since the PSS does not include the proposed location of Project facilities, the NYSAM is unable to perform a detailed route assessment and other related analyses typically conducted by technical staff during the review of a commercial wind energy generation project. Commenter recommends that Lighthouse Wind provide NYSAM with a detailed Project layout plan to allow for NYSAM staff to conduct its field review prior to Lighthouse Wind filing an Application with the Siting Board.	A figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints within the entire Project site is being provided as Appendix C to this comment response document. Lighthouse Wind will continue to consult with the NYSA&M for review of agricultural resources and potential impacts and mitigation measures for the Project.
47	Salmons, S.	47.1	Commenter believes that industrial wind turbines are not created cleanly, nor are they efficient. Commenter notes that investing in an industrial wind turbine would never give an adequate ROI. Commenter believes that if it wasn't for "government subsidies", then Lighthouse Wind would not pursue this Project and that only the lease signers (and Lighthouse Wind) benefit from the Project.	This comment does not specifically speak to a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. Information answering these concerns can be found in the PSS Section 1.5 and will be further detailed in the final Certificate Application.
48	Stilwel, D. (USFWS)	48.1	The Commenter states that in a letter dated May 6, 2015, to Lighthouse Wind, the USFWS summarized discussions of a meeting with Lighthouse Wind and informing Lighthouse Wind that additional information was required by the USFWS of the Project's potential impact and risk to wildlife. Commenter also notes that size and specific locations of turbines not provided in PSS.	Currently, a Project layout and design have not yet been completed and a turbine manufacturer and model have not yet been selected, which will affect the number and location of turbines for the Project. Potential temporary and permanent impacts to the environment, including wildlife, will be presented in the Certificate Application.
49	Wolanyk, E.	49.2	Commenter states that the PSS does not assess need for Project by addressing whether the Niagara Power Project or the Somerset Operating Station are performing (or not) at capacity. Commenter claims that both of these electric generating facilities provide more than ample electricity and therefore believes that the need is not apparent.	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in the Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal. The Somerset Operating Plant does not meet the criteria for the state energy goal.
49	Wolanyk, E.	49.3	Commenter notes that delivery of the proposed electricity will be hampered by a lack of sufficient power carrying capacity across the State to New York City. Commenter believes that the purpose of this Project is to capture the tax benefits provided by the state and federal governments and not to produce electricity.	As part of the REV proceedings and as part of the AC Transmission docket under review by the PSC, many upgrades will be made to allow for transmission of the power from this Project. The purpose of this Project is to help increase the amount of renewable energy in the State of New York in order to meet the State goals.
49	Wolanyk, E.	49.9	Commenter cites a statement from Page 4 of the PSS "Given turbine market conditions and rapidly evolving technologies, Lighthouse Wind has not yet selected a turbine manufacturer for the Project." Commenter asks how decisions can be made on the Project if the number, size and placement of turbines are not identified. Commenter continues and asks how can the impact of their operational sound be made if their size and height are not known? Commenter references the community outreach meetings, and contends that the proposed wind turbines would be the largest turbines ever constructed on land. Commenter feels it would be difficult to assess their impact due to a lack of available comparison. Commenter feels that the information available makes the Article 10 review process very difficult.	The PSS is used to scope the studies that will be performed and provided in a Certificate Application. Information on the number, size, and placement of wind turbines will be provided in the Application.
49	Wolanyk, E.	49.23	Commenter cites statement on Page 15 of the PSS: "Cross agricultural fields on ridge tops and other high ground to minimize cut and fill as well as potential drainage problems." Commenter claims this statement was cut and pasted from other applications. Commenter states that the topography of the Project site does not include ridge tops but, rather is flat land. Commenter requests that this statement be eliminated or revised to accurately represent the topography of the Project site.	Lighthouse Wind understands the commenter's note regarding potentially misleading language, and may revise the language or elaborate more upon the original statements within the Certificate Application. Ridges within the Project site may not resemble mountains but, rather low hills and more inconspicuous rises in topography.
49	Wolanyk, E.	49.38	Commenter indicates that the PSS does not address what will happen with the sub-station. Commenter asks if it will be dismantled and the land returned to a farmable status. Commenter also asks what the plan for restoration is after staging areas or other land is taken out of production.	As described in the PSS, it is currently planned that the interconnection will occur at the existing Kintigh substation which is a NYSEG facility. In regard to any of the Project infrastructure, a Decommissioning Plan will be provided in the Certificate Application and include further detail.
49	Wolanyk, E.	49.39	Commenter states that for the filing of the PSS both the mailing address and email address posted in Lighthouse Wind's PSS and the PSC site were incorrect. Commenter suggests that this error along with the supposed inaccuracies found in the documentation of community outreach in the PSS, are examples of the lack of attention to detail by Lighthouse Wind.	The information contained in PSS in regard to contact information was stated correctly. The commenter may be referring to notices provided by the Public Service Commission. Without detail on the "inaccuracies found in documentation of community outreach" no further response can be made to this comment.

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50	Atwater, R.	50.1	Commenter suggests the PSS does not include all required components. Commenter requests that the PSS be rejected and that Lighthouse Wind include the missing items and submit an amended PSS.	The PSS document is a scoping tool meant to establish methodology, scope of studies, or program of studies to be conducted in support of a Certificate Application. Lighthouse Wind believes it has provided the type of information that is required for a PSS during the Pre-Application phase of the Article 10 process. The Certificate Application will provide more details and specifics in regards to Project layout, turbine specifications, and other areas regarding the "scope of the Project."
50	Atwater, R.	50.2	Commenter requests that Lighthouse Wind include a map of all properties upon which any component of the major electric generating facility or the related facilities would be located, and all properties within 2,000 feet of such properties, that shows the current land use, tax parcel number and owner of record of each property, and any publically known proposed land use plans for any of these parcels.	This information will be included in the Certificate Application. Lighthouse Wind has provided a figure as Appendix C to this comment response document presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site. This figure shows all of the possible places that could support wind turbines. Final siting of the turbines and other Project facilities will be based upon the studies performed according to the PSS and the stipulation process.
50	Atwater, R.	50.3	Commenter requests that Lighthouse Wind include a map of existing zoning districts, and proposed zoning districts within the Project site, including a description of the permitted and the prohibited uses within each zone.	Lighthouse Wind will include the requested information within Exhibit 4 of the Certificate Application.
50	Atwater, R.	50.9	Commenter requests that the PSS include overlays on aerial photographs which identify the Project site and any interconnection route, the limits of proposed clearing or other changes to the topography, vegetation or man-made structures, and the location of access and maintenance routes.	Lighthouse Wind will include the requested information within Exhibit 4 of the Certificate Application. The maps will show all areas of proposed construction, including both permanent and temporary facilities.
57	Gardner, J. and J.	57.3	The commenter makes the statement "One of the only details I have found regarding Lower Lake Rd. as the Projects northern most border (1/2 mile from the water's edge) was shown in one of their glossy mailings, however, there is land signed north of Lower Lake Rd. The commenter opines that as a lakefront property owner, the northern most boundary of the Project is of great concern to them and believes it is too close to the pristine lake and wildlife. Lighthouse Wind promises there will be no turbines north of Lower Lake Rd. but made no promises regarding staging areas, switching stations, cement factories, etc."	A layout of all facility locations will be provided in the Certificate Application. It is correct that no turbines are planned north of Lower Lake Road. Comments are noted in regard to concern for other components being placed north of Lower Lake Road and will be considered as the final Project Layout is developed.
89	Woodrich, G.	89.1	Comment makes a statement in opposition of the Project due to the commenter's belief that State taxes are subsidizing the Project, which will not have an impact on state's energy supply.	This comment does not seem to refer to any specific portions of the PSS. Please see Section 1.5 of the PSS for Project Purpose, Need, and Benefit.
89	Woodrich, G.	89.2	Commenter makes a statement in opposition of the Project, "...a "RATED" 201MW from wind is unreliable, too expensive, cannot be stored and most important is not needed in WNY. If at 570 feet high the turbines see wind at a very unlikely 25% of the year the rated 201MW becomes an actual 50MW project."	Comment noted. Information regarding the final sizing and expected output will be included in the Certificate Application.
89	Woodrich, G.	89.5	Commenter makes the statement that power is needed on the east side of the Hudson River and not in the Project site. Commenter also claims that recent census figures indicate that Congresswoman Louise Slaughter's former Congressional District lost 42,522 residents from 2000 to 2010 in the vicinity of the Project site.	Power is used throughout the State of New York and is managed by the New York State Independent System Operator (NYISO). Currently New York is seeking to increase the amount of renewable energy produced and utilized in the state. This Project is in Congressional District 27, represented by Chris Collins.
90	Fuerch, D.	90.3	Commenter makes statement that in their opinion the Town of Somerset is not the most wind favorable region.	According to generally available data and data acquired by meteorological towers in the Project area, there is a strong wind resource in the Project area. Additional information regarding the wind resource and expected output of the Project will be available in the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.8	Town of Somerset objects to Lighthouse Wind's assertion that stake-holders and the general public should only be given 21 days to provide comment on the PSS. The Commenter believes that the 21 day comment period, as well as the extension of time to respond until January 12, 2016, is inadequate without the location of turbines or land under lease. The Commenter believes that the current political change in the Town of Yates also makes comment impractical at this time. The Commenter indicates that it is the Town of Somerset's position that the comment deadline should be indefinitely suspended, or that the PSS should be stricken in its entirety. Commenter states that the Town reserves its right to provide additional comments on the PSS when additional information regarding the Project is provided.	To the extent that this comment addresses the 21-day comment period provided for in the Article 10 Regulations, Lighthouse Wind defers to determinations already made by the Hearing Examiners and the Secretary on these issues. To the extent that this comment seeks to have the PSS stricken, these comments were made prior to the January 21, 2016 decision of the presiding examiners denying motions to strike or require amendment of the PSS. That issue has since been resolved, and no further response is needed. With regard to the portion of the comment reserving rights to submit additional comments on the PSS: the regulations do not provide for additional rounds of PSS comments following the comment response deadline. As to the remainder of the comment, Lighthouse notes that, although design and layout of the Project are not yet known, a figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulatory constraints is being provided with this comment response document. Lighthouse Wind currently has no land holdings and therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components, whether temporary or permanent. The buildable area figure provided as Appendix C to this comment response is based on a current, preliminary understanding of environmental and regulation constraints is being provided with this comment response document for identification of potential areas where Lighthouse Wind will consider securing easements or leases with private landowners for placement of turbines. Location of other Project components is currently unknown.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.9	Town of Somerset expressly incorporates § 1.2 of the Town of Yates Comments on Preliminary Scoping Statement, Filing No. 165 ("Yates Comments"). The comment is reproduced in its entirety: The PSS specifically identifies several application exhibits that were not 'scoped' in the PSS, including, but not limited to, exhibits pertaining to facility and turbine design, cost analyses, site restoration, decommissioning, and other public applications and filings. Since many of these exhibits appear to concern the financial costs and various impact(s) of the Project before, during, and after its completion, to the extent it is required to do so, the Town reserves its right to comment on these exhibits once they are provided later in the application process.	Lighthouse Wind will prepare and submit a complete Certificate Application which includes scoped items covered under the Article 10 Regulations. The items identified in the PSS as exhibits not requiring scoping were so designated because no specific study was proposed related to those exhibits, therefore no scoping of the study and its methodology was required. The information included in those exhibits will be thoroughly investigated, analyzed and set forth in the Application. The regulations do not provide for additional comments on the PSS document at this stage in the proceedings.
95	Vacco, D. (Town of Somerset)	95.10	Commenter states that the Town of Somerset disagrees with Lighthouse Wind's assertion that Exhibits 16, 17, 38, and 39 do not need to be scoped in the PSS. Commenter believes that Exhibit 16, Pollution Control Facilities, does apply to the Project due to the use of hydraulic and lubricating oil and the need to store, replace, and dispose of it on a regular basis. Commenter requests that Lighthouse Wind quantify the amount of potentially hazardous materials required for the Project, the amount of potentially hazardous waste to be stored and disposed of, describe the storage and maintenance facilities necessary and outline environmental responses required in the event spills or other accidents occur. The Commenter requests Lighthouse Wind's scoping statement be made in accordance with 16 CRR-NY 1001.16. Commenter requests that Exhibit 16 address Pollution Control Facilities for the construction of the 61-71 concrete pads, the associated concrete plant, the construction of roads, and the use and maintenance of all necessary construction equipment. Commenter feels that the construction of a concrete plant may also require Exhibit 17, Air Emissions, to be addressed, as well as Exhibits 38 and 39, Water and Waste Water Interconnections.	As stated in the PSS, the proposed Project is not expected to require pollution control facilities, as such; the requirements of the exhibit are not applicable to the Project. Wind turbines generate electricity without combusting fuel or releasing pollutants into the atmosphere. Because wind turbines generate electricity without releasing pollutants into the atmosphere, the proposed facility will not be subject to New Source Performance Standards, and will not require air pollution control permits under Clean Air Act or New York State law or regulation. Because this Project involves construction and operation of wind turbines, there are no "fuel-waste byproducts" which would be produced as a result of construction and operation of the facilities. As such, the statements regarding waste in accordance with 16 CRR-NY 1001.16 are not applicable to the Project. As required by Exhibit 23 of the Article 10 Application, Lighthouse Wind will include a description of spill prevention and control measures to be in place for any chemical, petroleum, or hazardous substances to be stored on-site (if any). Lighthouse Wind reaffirms its beliefs that Exhibits 16, 17, 38, and 39 are not required to be scoped in the PSS. During the site preparation and construction phases of the Project, temporary minor adverse impacts to air quality could result from the operation of construction equipment and vehicles. Such impacts could occur as a result of emissions from engine exhaust and from the generation of fugitive dust during earth moving activities and travel on unpaved roads. The increased dust and emissions will not be of a magnitude or duration that would significantly impact local air quality. Any impacts from fugitive dust emissions from travel on unpaved roads are anticipated to be short-term and localized and will be avoided or corrected quickly. The Certificate Application will provide further information on any Concrete Plant(s) if they are to be utilized.
95	Vacco, D. (Town of Somerset)	95.11	Commenter states that the Town of Somerset objects to Lighthouse Wind's statement that it will "request that the Siting Board waive substantive local requirements, as applicable, in accordance with 16 NYCRR § 1001.31(e)." Commenter believes it is the Town's position that such waivers are unconstitutional and in violation of Article IX of the New York State Constitution. Commenter claims that the Siting Board does not have the authority to overrule local laws in violation of the Constitution. The Commenter believes that this Section should be stricken from the PSS, and the Siting Board should not be afforded the opportunity to "waive" local law.	This comment does not address content of the PSS, but is a general argument regarding the Article 10 statute. We refer commenter to Public Service Law § 172(1).
95	Vacco, D. (Town of Somerset)	95.12	Commenter requests that Lighthouse Wind submit a new PSS providing substantive information including the following information: The location of private land currently under lease, the amount of land required to complete the Project, the amount of additional land that may be purchased or leased to allow the Project to proceed, confirmation that Lighthouse Wind has the necessary land under lease to complete the Project, the location of optimal wind resources, confirmation of whether the Project will be located on contiguously located parcels, or spread out over a greater distance, the model and size of turbine, if the Project is sited today, the length (miles) of access roads to be built, the acreage of farmland that will be permanently and/or temporarily disturbed by turbine towers, the type and size of facilities needed for construction, operation, maintenance, and emergency/disaster response, location of the same.  Commenter requests that Lighthouse Wind refile Section 1.3 of the PSS with the information required by 16 NYCRR § 1001.3, and stakeholders offered adequate time to comment on this information.	To the extent that this comment seeks to have the PSS stricken, these comments were made prior to the January 21, 2016 decision of the presiding examiners denying motions to strike or require amendment of the PSS. In denying these motions, the Hearing Examiners held that "the purpose of the preapplication scoping phase is to ensure meaningful public input at an early enough point in the project development process to allow the developer in crafting its formal proposal to account for specific conditions within the Project study area and to account for community concerns. Scoping is based on early public input to allow a developer to make changes early in the Project formulation process before the developer has become committed to a specific layout or approach. Initial studies and investigations will be conducted pursuant to the PSS after modifications based on comments on the PSS and pursuant to the stipulations [process] . . . The findings of those initial studies and investigations will then be used by the Project sponsor to make decisions about the preliminary Project Layout including the specific proposed placement of individual Project elements, both in the PSS and by means of the -- the stipulation process which will shape those decisions. There's nothing in the rules that requires the Project sponsor to -- to include the level of detail that the movants seek. The motions, in essence, proceed on a misapprehension of the purpose and intent of the scoping process." To the extent that Commenter seeks information which is required as part of its full Article 10 Certificate Application, Lighthouse Wind fully intends to comply with the application requirements set forth in the regulations and to submit all relevant information required therein.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.13	Commenter suggests that Lighthouse Wind misrepresents the environmental setting of the proposed Project in Section 1.4 of the PSS as one of mixed-use development with a large pre-existing industrial footprint. Commenter believes that the wind turbines will be located along the lake shore and will be entirely contained within residential, residential lake shore, agricultural and state parkland areas. Commenter believes it is disingenuous to describe this area as mixed use or partially industrial in nature since the region contains farmland, parkland, and a heavy concentration of residences along the lake shore and main roads. The Commenter states that these lakeshore residences are not "seasonal" in nature as described by Lighthouse Wind in the PSS. Commenter claims many families have their permanent, year round homes on the lakeshore. Commenter requests that Lighthouse Wind be required to resubmit the PSS with an accurate, detailed description of the environmental setting and include the exact location of parcels currently owned or leased by the Lighthouse Wind, and their proximity to residential, farm, and park land.	Lighthouse Wind respectfully disagrees with the first part of this comment. Based on initial review of land use in the area, Lighthouse Wind accurately identifies several industrial uses, including an active CSX-owned railroad, the Somerset Operating power plant, and a roadway network in the Project area, as well as the Industrial Zoning Districts established by both the Town of Somerset (Industrial District and General Industrial District) and the Town of Yates (Light Industrial and Industrial). Additional commercial and industrial developments are concentrated around neighboring villages and hamlets. Further, the Towns' zoning codes define "industrial uses" broadly to include manufacturing, fabrication, assembly, treatment, packaging, agricultural product processing, incidental storage (such as businesses offering rentable storage units or commercial warehouses), or enterprises which involve processing of flammable or explosive materials, or result in hazardous or offensive conditions (dust, odor, fumes, etc.), such as motor vehicle repair shops and wholesale beverage facilities. Lighthouse Wind continues to consult with the Towns' existing zoning codes to see how land uses are locally defined. Lighthouse Wind agrees with the commenter that there are families that maintain permanent year round homes on the lakeshore; however there are also many seasonal homes in which families stay during certain times of the year. Many of the comments Lighthouse Wind has received regarding the Project have been from seasonal residents. The Article 10 Application will provide a more refined study of the environmental setting of the Project. The Application will also include Project layouts and will identify lands under lease or owned by Lighthouse Wind in addition to maps indicating land uses within these areas. As previously stated by Lighthouse Wind, no wind turbines are planned north of Lower Lake Road in Somerset or Lakeshore Road in Yates, and therefore they are not "right on the lakeshore." Appendix C of the response document shows a map of areas where turbines could be built.
95	Vacco, D. (Town of Somerset)	95.14	Commenter refers to Section 1.5 PROJECT PURPOSE, NEED AND BENEFIT of the PSS and that Lighthouse Wind will provide a "significant source of renewable energy to the New York State Power grid." Commenter requests that Lighthouse Wind be required to show the actual likely yearly output of its facility and claims that the actual likely output would be impacted by factors that are not addressed in the PSS. Commenter requests explanation that the Project can expect to meet the needs of 53,000 households. Commenter asks if this assumption is based upon all turbines operating at peak capacity at all times.	The final Certificate Application will include information regarding the expected output of the facility based upon final layout, design, and turbine model. The preliminary figures were derived using the following methodology:  Step 1: Multiply the size of the Project (measured by the megawatts of capacity that it has) by the anticipated efficiency rating for the specific project, based on the site, turbine model, etc. (also called "net capacity factor" or NCF). The NCF for a project is proprietary, but it is calculated based upon real, existing wind data. This produces an estimate of the number of MW the Project will actually produce (since turbines will not always be operating at full capacity.)  Step 2: multiply the "actual MW" by the number of hours in the year (8760). This helps us estimate how many MWh will be produced every year (MWh/year).  Step 3: Use existing energy consumption data, as recorded in the US Census, to determine the average annual energy consumption for a US household.  Step 4: Divide the MWh/year that will be produced by the Project by the number of MWh consumed by the average US household to determine the number of average households that can be powered by the energy produced by the wind farm.
95	Vacco, D. (Town of Somerset)	95.15	Commenter suggests the following items be addressed in Section 1.5 Project Purpose, Need and Benefit of the PSS to demonstrate the need of the Project: actual energy demand in the region; the cost and carbon-footprint of fossil-fueled back-up facilities that may otherwise be closed; tower maintenance schedules resulting in down time; average turbine failure rate resulting in down time; and the average meteorological conditions of the Project site including daily average wind speed, temperature, and precipitation.	The Application will include an Exhibit devoted to electric system effects (Exhibit 5) and electric system production modeling (Exhibit 8) which will address the information required by Article 10 related to effects on the electric system, locally and statewide, Consistency with Energy Planning Objectives (Exhibit 10), and Exhibit 9 will look at alternatives to the Project, including a no action alternative. Details regarding operations and maintenance of the Project will be provided in Exhibits 6, 11, and 12 and elsewhere in the Application where relevant to a specific topic such as noise or public safety. These exhibits will discuss relevant information related to the energy demand and system-wide impact questions posed here, to the extent required by Article 10.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.16	Commenter challenges Lighthouse Wind's claim that there will be an economic benefit to the local community based on the creation of "up to 13 local, full time positions," and "direct payments to the local taxing jurisdictions ... expected to total at least \$1.5 million per year ...." Commenter claims there is a real possibility that 3,200 jobs could be lost at the nearby Niagara Falls Air Reserve Station, see Filing No. 174. Commenter also states that the Niagara County Legislature and the Town of Somerset are currently opposed to any PILOT type agreement. Commenter states that if property values decrease, the tax base for the county, town, and villages may be reduced. Commenter requests that all of its concerns should be addressed in the PSS.	<p>Lighthouse Wind is required, and fully intends, to consult with the Department of Defense and with the FAA regarding any potential interference between wind components and the base, or airspace generally, and to investigate any potential impacts to transportation and communications (Exhibit 25 &amp; 26). If the DoD has concerns, and requires changes or mitigation in the Project, that will happen in accordance with the DoD's established coordination process. It has been proven that wind projects can and do coexist in proximity to many other uses, including military bases and airports. In New York State, and elsewhere, multiple wind projects are already sited proximate to other military bases where radar and flight training is used, such as Fort Drum in Jefferson County.</p> <p>There has not yet been an official determination as to whether this Project would directly harm the Niagara Air Reserve Station's operations, or that mitigation to address potential impacts couldn't be implemented to address any impacts. Further, the Base Realignment and Closure Commission (BRAC) has not been convened since 2005, so there is limited information available on whether, or the extent to which, proximity to wind projects elevates a base's risk for closure. In fact, the DoD has publicly voiced support for locally-sourced renewable power generation as a matter of base energy security and protection of military installations from vulnerabilities associated with catastrophic grid failure. In addition, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore it is premature to speculate that the presence of a wind farm would have any unmitigable impact on the base.</p> <p>With respect to the taxing issues raised by the comment, Lighthouse Wind has indicated that it will consult with the County IDAs regarding the possibility of applying for a PILOT arrangement that would generate significant tax revenue for the local host municipalities and school districts. With respect to property values, the Application will provide support for the statement that wind projects do not result in the reduction of the tax base for local municipalities. In fact, the evidence will show that the opposite is true.</p>
95	Vacco, D. (Town of Somerset)	95.62	Commenter states that, beyond income for Lighthouse Wind and its affiliates, Lighthouse Wind must provide concrete, quantifiable examples of the Project's benefit.	Lighthouse Wind's Application will include an Exhibit on Socioeconomic Effects (27); Consistency with Energy Planning Objectives (Exhibit 10); Real Property (Exhibit 13). These exhibits will explore in detail the potential benefits--quantifiable and unquantifiable--that are anticipated to result from this Project, which could include, among other benefits, (1) furtherance of state policy mandating the development of large scale renewable development (2) significant payments to local municipalities and school districts through PILOT an Host Community payments and (3) local host landowner payments (many of which are agricultural and farm lands).
95	Vacco, D. (Town of Somerset)	95.E9.3	The commenter requests the removal of statements about industrial uses being interspersed throughout the Project area in Section 1.3 of the PSS.	Lighthouse Wind respectfully disagrees with the first part of this comment. Based on initial review of land use in the area, Lighthouse Wind accurately identifies several industrial uses, including an active CSX-owned railroad, the Somerset Operating power plant, and a roadway network in the Project area, as well as the Industrial Zoning Districts established by both the Town of Somerset (Industrial District and General Industrial District) and the Town of Yates (Light Industrial and Industrial). Additional commercial and industrial developments are concentrated around neighboring villages and hamlets.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.1	Regarding the PSS Executive Summary, the commenter states that if the Project is not needed to produce energy in a particular area or if it is displacing existing renewable energy then it is neither offsetting climate change nor fulfilling New York State policy goals. The commenter indicates that the need for "the Project" is not established in State and Federal policy rather the need for the Project should be set forth in this PSS, and the commenter believes that it has not been. The commenter states that comments have informed Lighthouse Wind that there is a glut of energy in Western NY (commenter provides examples of the Stamp project in Genesee County and Huntley coal power station in Tonawanda). The commenter indicates that Lighthouse Wind needs to justify the existence of this power plant in its proposed location and it has failed to do so in this PSS.	Discussions regarding the need for the Project will be included in Lighthouse Wind's eventual Certificate Application. Because the purpose of the PSS was to identify the scopes and methodologies of studies to be performed in anticipation of Lighthouse Wind eventually filing an Application, the PSS did not delve into many of the items which it will analyze and discuss in its Application. The Article 10 Application--when filed, will include a discussion of consistency with state energy policy (Exhibit 10), and the need for the Project in the overview section (Exhibit 2). In addition, as indicated in the PSS, the need for large scale renewable energy projects, such as the Lighthouse Wind Project, is well established in State and Federal policy and is incorporated by State Law in the State Energy Plan. This particular location is important to the State meetings its goals for renewable energy development by virtue of the strong wind resource in the Project area.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
96	Kremer, K. (Save Ontario Shores, Inc.)	96.2	Regarding PSS Section 1.5, the commenter states that Lighthouse Wind fails to identify any of the issues set forth in 16 NYCRR 1001.10 Exhibit 10. The commenter indicates regional capacity requirements and existing renewable energy availability must be addressed as well as existing transmission constraints. The commenter also indicates that Exhibit 10 (i) requires a statement of the reasons why the proposed location and source is best suited, among the alternatives identified, to promote public health and welfare, including minimizing the public health and environmental impacts related to climate. The commenter believes we can have renewable energy and protect avian resources, but this demands that the issues with the siting of this Project be acknowledged up front. The commenter claims that Lighthouse Wind has not provided sufficient specificity with how it plans to address potential issues.	The requirements listed in 16 NYCRR 1001.10 (Exhibit 10) are items which must be included in Lighthouse Wind's eventual Certificate Application. Because the purpose of the PSS was to identify the scopes and methodologies of studies to be performed in anticipation of Lighthouse Wind eventually filing an Application, the PSS did not delve into many of the items which it will analyze and discuss in its Application. As confirmed by the Hearing Examiners during the January 21, 2016 preliminary conference in Barker, New York, the purpose of the PSS and the scoping phase of the Article 10 process is to "ensure meaningful public input at an early enough point in the project development process to allow the developer in crafting its formal proposal to account for specific conditions within the Project study area and to account for community concerns." This "formal proposal"--the Article 10 Application--when filed, will include a discussion of electric system issues and energy policy (Exhibits 5, 8, and 10), as well as public health (Exhibit 15), and environmental impacts, including climate change (Exhibit 10(i)).
97	Wasilewski, T.	97.5	The commenter would like evidence to support the statement made in the PSS that the Project site was selected because of its strong wind resources.	This information will be included in Exhibit 6 of the Certificate Application.
97	Wasilewski, T.	97.6	The commenter would like evidence to support the statement made in the PSS that there are willing participant landowners with contiguous parcels large enough to support the Project.	Information regarding the leased parcels will be provided in Exhibit 13 of the Certificate Application.
97	Wasilewski, T.	97.11	Commenter would like to know the turbine model to be used and Project layout.	Information regarding the turbine model will be provided in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.1	The commenter indicates that Lighthouse Wind proposes a major large-scale wind energy project in one of the two areas of concentrated wind farm development in New York. The commenter believes this contravenes the State's emerging policy to ensure that large-scale renewables are sited near load centers and avoid congestion and bottling of electricity transmission caused by intermittent power surges.	Exhibit 10 of the Application will include an investigation and discussion of the proposed Project's consistency with State Energy Planning Objectives, while Exhibits 5 and 8 will include detailed analysis of the electric system impacts and implications of the proposed Project within the broader context of the State's energy system, including transmission capabilities and limitations. While generally energy planning seeks to locate generation near load, with some renewable energy resources, such as wind projects, potential project locations are limited by the location of sufficient wind resource, in this case New York has significant wind resources in the areas identified by the commenter in upstate and northern New York. Other proceedings are ongoing at the Public Service Commission to address, as a collective public policy benefit, transmission siting and other efforts to address congestion and constraints to delivering to load. These proceedings and the issues addressed are beyond the scope of this application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.2	The commenter indicates that proposed Project would be located in Lake Ontario coastal area, a center for tourism and host to exceptional scenic views, and one of eastern North America's most important bird migration flyways. Commenter notes Project would also alter the acoustic and visual environment; further remarking noise effects have been recognized as serious public health impacts. Commenter notes alteration and fragmentation of the natural environment would be significant. Lighthouse Wind faces a high burden to demonstrate the Project Need and its' advancement of energy planning strategies. Commenter notes that the PSS is heavy on policy assertions and does not indicate location of Project components. Public is left to speculate on the scope of project impacts on health and the environment. Commenter wonders how a "study area" which is generally a five mile-radius around Project components, is known, but not the location of the Project components themselves.	Noise and Vibration were addressed in the PSS Section 2.4. Cultural Resources were addressed in Section 2.5 of the PSS. Visual Impact was addressed in Section 2.9. Socioeconomic Effects were addressed in Section 2.12 of the PSS.  The PSS and the public comments received on the PSS are intended to identify the studies that should be undertaken by Lighthouse Wind to analyze the Project within the context of existing community planning and land use restrictions. When additional information is available, the process will allow for further opportunity for stakeholders to comment on the arrangement of Project components.  An exhibit of areas where wind turbines could be built based upon current setbacks is attached to this Comment Response Summary.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.3	The commenter disagrees with the PSS Executive summary, where the Project goals and need are described. The commenter states the application will need to demonstrate that the energy anticipated to be provided by the Project to the grid would be "significant," and uses the 2004 State's Renewable Portfolio Standard (RPS), to support their claim that all large-scale wind projects in New York are not a significant source to the grid. The commenter therefore states the application should demonstrate that this Project would provide a significant source of renewable energy to the New York State power grid, and refers to the attached comments by Thomas Tanton. The commenter also states costs to ratepayers and the ability to make a significant contribution to the State's energy needs should be prominent parts of the evaluation of the need for the proposed Project.	This information will be provided in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.4	Commenter references New York REV supporting a change in focus to distributed energy and suggests large-scale renewables may hinder rather than enhance demand elasticity and efficiencies. Commenter suggests this shift in priority should also trigger greater scrutiny of the potential for adverse impacts to wildlife and to the human residents who would be asked to host the Project's components. Requests application include a robust demonstration that there is a State need for another wind farm sited far from load centers with unmet demand in the midst of a rural residential community within known migratory bird and bat habitat and flyways. Commenter states they know of no federal directives that wind powered electric generating facilities be sited in this region, and if there are general policies promoting wind powered electric generating facilities, the application should demonstrate that such policies are associated with siting directives that would establish this Project is specifically needed.	This information will be provided in the Certificate Application.

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Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.40	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests a map of turbine sites so that site specific impacts can be identified and evaluated.	Lighthouse Wind has not yet selected a turbine manufacturer or model, therefore the Project layout has not yet been determined. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this comment response document. The scope and methodology of studies presented in the PSS are based on the Project Study Area and therefore, will not be affected by turbine height or specific locations of Project components.
102	Behnke, H. (DPS)	102.136	Commenter indicates that Lighthouse Wind includes Exhibit 6 "Wind Power Facilities" under the list of exhibits which do not require scoping. DPS Staff requests that the PSS include descriptions of factors to be considered regarding setback requirements/recommendations and applicant's internal specifications. DPS staff also request acknowledgement by Lighthouse Wind as to whether or not manufacturer's setback specifications will be followed for all turbine models under consideration. Provide an explanation of the degree to which the facility layout will accommodate turbine setbacks.	As previously stated, Lighthouse Wind is still considering a range of potential turbine models. To the extent that a turbine model is selected for which there is a manufacturer's setback specification, that information will be provided, and a discussion regarding compliance (or reasons for deviation, if applicable) will be included. There are various setbacks used in the design and alternative analysis of a project. These setbacks come from internal standards, now current local laws, manufacturer requirements, and those put forth from regulatory bodies such as PSC, DEC, and NYS Ag and Markets. The development of the location of the Project components requires an iterative process of applying all such setbacks. Information on the range of proposed setbacks, depending on turbine model selected, will be included in the Preliminary Design Drawings at Exhibit 11. A preliminary setback map has been provided as an appendix to the Response Summary Document.
102	Behnke, H. (DPS)	102.137	Commenter requests that Lighthouse Wind describe status of third party review and type certification of wind turbines in Application. During consultation for the turbine setbacks with the manufacturer, it is advised to get their written confirmation. The written confirmation should be submitted along with the application.	This information will be provided in Exhibit 6 of the Certificate Application.
102	Behnke, H. (DPS)	102.138	Commenter requests that Lighthouse Wind indicates if wind turbines will be independently certified as meeting international design standards by independent product safety certification organizations, and provide the design lives of all turbines under consideration.	This information will be provided in Exhibit 6 of the Certificate Application.
102	Behnke, H. (DPS)	102.139	Commenter requests that Application contain all relevant information required by Exhibit 6 for each turbine model under consideration, including setback requirements, siting recommendations, to the extent available each manufacturer's recommendations and safety specifications related to setbacks, and specific manufacturers' requirements for third-party review and certification of wind turbines.	This information will be provided in Exhibit 6 of the Certificate Application.
102	Behnke, H. (DPS)	102.140	Commenter indicates that a Revised Scoping Statement should indicate the number of temporary and permanent meteorological towers anticipated to be installed, along with a description of the height and type of towers and locations shown on a map.	Currently, there is one (1) temporary meteorological (met) tower installed in the Town of Yates and one (1) temporary met tower installed in the Town of Somerset. The towers are approximately 197 feet in height and are collecting meteorological and wildlife study data by virtue of the instruments installed on the towers. The location of the temporary met tower in Yates is at the corner of Marshall Road and Lakeshore Road, on private land. The location of the temporary met tower in Somerset is directly across from the entrance to the Golden Hill State park, on Lakeshore Road, on private land.  In addition, Lighthouse has applied for two (2) additional met towers in the Town of Somerset. The proposed towers would be approximately 197 feet in height and are proposed to be located at 8746 Lake Road, Barker, NY, 14012, on private land and 7469 West Somerset Road, Barker, NY, 14012, on private land. Lighthouse Wind has provided a figure presenting the locations of currently installed and proposed additional met towers with this response document. This information will also be provided in Exhibits 6 and 11 of the Certificate Application.
102	Behnke, H. (DPS)	102.141	Commenter suggests that a copy of the wind meteorological analysis be submitted with the Certificate Application.	16 NYCRR §1001.6 requires "Wind meteorological analyses demonstrating adequate wind conditions supporting the estimated capacity factor for the facility." This information, as well as information required by 16 NYCRR §1001.8 "Electric System Production Modeling" will be provided in the Certificate Application.
104	Spitzer, D. (Attorney for Town of Yates)	104.5	Town of Yates reiterates its concern for the lack of details provided by Lighthouse Wind in the PSS and supports a motion to resubmit the same. The Town confirms its request that the PSS be supplemented with the provision of disclosures meeting the requirements of 16 NYCRR § 1000.5. Commenter suggests that Lighthouse Wind does not provide a reason why it cannot give more than an outline of the Town boundaries at this time. Commenter notes that the leases at very least should also be disclosed.	Lighthouse Wind has not yet selected a turbine manufacturer or model therefore, Project layout has not yet been determined. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of Application filing. Lighthouse Wind has provided a figure presenting potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this comment response document. The scope and methodology of studies presented in the PSS are based on the Project Study Area and therefore, will not be affected by turbine height or specific locations of Project components. The Application will also include a demonstration that Lighthouse Wind has obtained, or can obtain, title to or a leasehold interest in the facility sites. A statement will also be provided that Lighthouse Wind has obtained, or can obtain, such deeds, easements, leases, licenses, or other real property rights or privileges as are necessary for all interconnections for the facility.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
110	Isselhard, A.	110.1	Commenter quotes the mission statement of the PSC, Article 10 definition of "Certificate", and Section 162 stating a Project must be in conformity of the Certificate. Commenter states that Lighthouse Wind does not comply with Section 163 in that they didn't describe the facility as required (identifying the turbine make, model, specifications and turbine locations). Commenter states that in planning the project for well over a year, the make and model must be known by now. Commenter states that by knowing the project is a 201MW project, the output of each turbine must be known as well.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind would like to clarify that there is no requirement to provide a project layout within the PSS in the Article 10 regulations, as confirmed by the Hearing Examiners in their January 21, 2016 ruling on this issue. As stated in the PSS, turbine manufacturer and model has not yet been chosen due to market conditions and rapidly evolving technologies. The number and location of the turbines will be dependent on the turbine model chosen in order to meet the proposed generating capacity of the Project. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site as Appendix C to this response document.
110	Isselhard, A.	110.12	Commenter notes that Attorney Vacco for Somerset sought to have the PSS rejected for not listing the number, size, generating capacity or location of the turbines. Also, the Project boundary includes all of the area designated with LWRP for Somerset and part of the LWRP for Yates and the PSS lacks turbine specifications such as heights and specifications for details on noise.	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. To the extent that this comment seeks to have the PSS stricken, these comments were made prior to the January 21, 2016 decision of the presiding examiners denying motions to strike or require amendment of the PSS. That issue has since been resolved, and no further response is needed. As to the remainder of the comment, Lighthouse notes that, although design and layout of the Project are not yet known, a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulatory constraints is being provided as Appendix C to this comment response document.</p> <p>Because a Project Layout has not been finalized, it is unknown if any natural resources of the coastal area would be impacted by the construction or operation of the Project. At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p>
111	Jarvis, C.	111.1	Commenter is disappointed that the PSS does not include basic information on the proposed installation of 50 to 72 wind turbines.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind has provided the type of information that is required for a PSS during the Pre-Application phase of the Article 10 process. Lighthouse Wind has provided a figure as Appendix C to this response document presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site. This figure shows all of the possible places that could support wind turbines. Final siting of the turbines will be based upon the studies performed according to the PSS and the stipulation process. The Certificate Application will provide more details and specifics in regards to Project layout, turbine specifications, and other areas regarding the "scope of the project."
DMM13	Riggi, D.	DMM13.1	Commenter asks how large the turbines will be and where they are located. Also asks about locations of transformers and substation(s). Commenter requests the location of all facility components required for operation of the Project. Commenter notes that the information provided by Lighthouse Wind is inadequate to form a response.	Lighthouse Wind has not yet selected a turbine manufacturer or model, therefore Project layout has not yet been determined. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this response document. The scope and methodology of studies presented in the PSS are based on the Project Study Area and therefore will not be affected by turbine height or specific locations of Project components.
DMM24	Smith, A.	DMM24.1	Commenter states that the PSS includes no specifics regarding the size of the proposed wind turbines, although the residents have been told they could exceed 600 feet. Commenter also states that although leaseholders are known, the PSS does not include where the turbines will be placed on the properties, how they will be grouped, or how many are proposed. Commenter demands the PSS is rejected and refiled with this information.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application submittal. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this response document.
DMM40	Kent, G.F.	DMM40.3	Commenter remarks there are innumerable locations in New York State far better suited to wind turbines than Orleans County. Abandoned industrial sites come to mind. The Tug Hill plateau is another. If 590' wind turbines were going to be placed in the Atlantic Flyway, locating them offshore would be far preferable environmentally to locating them on the fertile Lake Ontario plain.	Potential alternative locations for an economically viable wind energy project are dependent on a number of factors which were preliminarily assessed as described in the PSS Section 2.15 Evaluation of Alternatives. The availability for the suggested alternative sites such as abandoned industrial sites, the Tug Hill plateau, and offshore locations to be economically viable would be dependent on the same factors. The Certificate Application Exhibit 9 will include a description of reasonable and available alternative location sites for the proposed Project.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM56	Lewicki, D.	DMM56.1	Commenter indicated that Lighthouse Wind has in its possession, the list of signed leaseholder agreements and that it is reasonable to assume that placement of wind turbines would occur within these parcels. Lighthouse wind can also narrow the siting of the turbines within these parcels given their location to other residences, current setback requirements structures, roads etc. It can then also provide preliminary information to the public/stakeholders regarding other components of the facility. This is reasonable information that is available that Lighthouse can generate for the PSC and all stakeholders at this time. Again, previous PSS submissions for other projects contain this detail and these submissions set the standard for what is expected in a PSS. I urge the DPS/PSC to reject the PSS and force Lighthouse Wind to provide the needed level of detail of information that it has and can generate for a properly detailed PSS.	There is no requirement in the Article 10 regulations to provide a Project Layout with the PSS. As stated in the PSS, Lighthouse Wind currently has no land holdings and therefore will secure easements or leases with private landowners to obtain the rights to place all Project components. Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout and will provide this information as soon as it is available. A figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints is being provided as Appendix C to this response document. Location of other Project components is currently unknown. Final specifications of the layout will be provided in the Certificate Application.
DMM60	Hellert, C.	DMM60.1	Commenter expresses that is it unacceptable that in Lighthouse Wind's email blog, they note that the turbine model and locations are still not known.	As stated in the PSS, turbine models and locations have not yet been chosen due to market conditions and rapidly evolving technologies. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of Application filing. Lighthouse Wind has provided as Appendix C to this response a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site.
DMM73	Lewicki, D.	DMM73.1	Commenter indicates a need for maps showing preliminary placement of turbines within the study region, and a narrowing of models of turbines to be used in the Project in the PSS. The PSS, according to Article 10 is to provide as much detail about the Project as is reasonable. The Lighthouse Wind submission doesn't come close to the standard set by Cape Vincent Wind Project (CVWP). CVWP provided preliminary siting maps. The Lighthouse Wind PSS should be considered a PPSS -- a Preliminary to the Preliminary Scoping Statement. Commenter believes that Lighthouse Wind intentionally withheld reasonable information which it has in its possession which would be helpful to all stakeholders involved. Why didn't Lighthouse provide at least a map of current leased parcels in the study area? It has signed contracts from landowners. Why wasn't this information at least put into the PSS? Why are they holding back and claiming that preliminary siting can't be done until studies are done? Lighthouse should not have been permitted to move forward with private lease negotiations until studies are done. Given the lack of specificity in the PSS, commenter questions I am left wondering why Lighthouse wind continues to keep the public/affected residents in the dark.	The information requested regarding lease holders will be provided in the Certificate Application. Lighthouse Wind has not yet selected a turbine manufacturer or model therefore, preliminary layouts have not been evaluated. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided with this response a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site as Appendix C to this comment response document.
DMM80	Doughty, K.	DMM80.4	Commenter indicates wind energy is overly subsidized relative to its energy and environmental efficiency and promises to bring only short-term, if any, job creation and economic benefit to this community's residents.	Information regarding jobs and economic benefits was included in the PSS Section 2.12. Additional information will be provided in Exhibit 27 of the Certificate Application.
DMM81	Dudley, S.	DMM81.3	Commenter claims that industrial wind turbines are not a sustainable or affordable means of generating electricity. Commenter suggests that wind turbines do not provide the consistent electricity required and are not capable of meeting electricity demand peaks. Commenter believes that the proposed Lighthouse Wind project will feed into an aging transmission grid and not serve local customers (per REV). Commenter also states that worldwide wind is proving to be expensive and could potentially result in higher electricity costs for consumers. Commenter believes commercial wind turbines do not provide a viable economical solution to greenhouse gas emissions. Commenter states that NY State had the largest decline in CO2 emissions between 2000 and 2013. (Commenter adds that according to the EIA it was 52 million mt in New York state, a 25% decrease. Commenter indicates that the state is already on target to meet emission reduction goals.	Lighthouse Wind respectfully disagrees with the commenter's statements. As Lighthouse Wind stated in the PSS, Section 1.5, Project Purpose, Need and Benefit, in September of 2004, the New York State Public Service Commission issued an Order adopting an RPS, with a goal of increasing the proportion of renewable energy used by New York consumers from the then-current 19.3 percent to at least 25 percent by the end of 2013. In January 2010 the RPS goal was increased, and the goal for the proportion of renewable energy used by New York consumers for renewable resources was revised from 25% to 30% and the term for attaining the program goal was extended to 2015. The RPS has been extended to include another solicitation in 2016, but is expected to be replaced by the Clean Energy Standard as part of the Reforming the Energy Vision (REV) proceeding. The details of this proceeding and any resulting programs or legislation are pending. The State Energy Plan goal put forth last year was to achieve 50% renewables by 2030. Pending finalization of the goals, programs, and statutes, Lighthouse Wind plans to comply with REV by contributing to the REV target of 50% of all New York's energy being generated from renewable sources.
DMM81	Dudley, S.	DMM81.4	Commenter states that the Project will provide only 10 jobs, and states that one of the positions will be part of the post-construction monitoring.	As stated in the PSS, during operations it is anticipated that up to 13 local, full-time jobs will be required. Any post-construction monitoring plans and potential staffing will be discussed in the Application.
DMM82	Londergan, M.	DMM82.2	Commenter notes that this short lived project (10-15 years) could potentially cause environmental harm that will allegedly outlast the amount of power that the Project would be contribute to the electric grid.	Lighthouse Wind will submit an Application which will include the data required to assess the benefits and impacts of the proposed Project.
DMM83	Doughty, P.	DMM83.2	Commenter believes that wind power has proven to be an ineffective and unreliable renewable energy that will provide little benefit to their community or others in the future. Commenter alleges that wind energy is not sustainable and that it doesn't benefit anyone except developers such as Lighthouse Wind. Commenter believes that countries that have invested millions in wind energy are now trying to dismantle their turbines and are left with plenty of heavy metals and no real disposal options. Commenter suggests that Lighthouse Wind will not be a part of the Project during decommissioning.	The State Energy Plan goal put forth last year was to achieve 50% renewables by 2030. Pending finalization of the goals, programs, and statutes, Lighthouse Wind plans to comply with REV by contributing to the REV target of 50% of all New York's energy being generated from renewable sources. In terms of Project decommissioning, a draft Decommissioning Plan will be included as Exhibit 29 of the Certificate Application outlining the decommissioning process.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM88	Wayner, R. (Somerset Town Councilman)	DMM88.1	Commenter indicates that as Town Councilman, he has heard the voices of the people from the Town of Somerset and they do not want the Project. In addition, the commenter indicates there is no need for the Project as they have an excess of electrical generating capacity.	Lighthouse Wind will submit an Application for the proposed Project that will include the detail necessary for the public and their representatives to assess it appropriately.
DMM94	Dudley, S.	DMM94.1	Commenter indicates that government should subsidize LED lighting, not industrial wind turbines, as Americans energy conservation efforts, including switching from incandescent to alternative bulbs has done more to reduce carbon emissions than increased use of solar, wind, and natural gas (according to August Article in Bloomberg Business)	Comments noted.
DMM95	Dudley, S.	DMM95.1	Commenter indicates that based on EIA 2013 stats, NY state is 50th in consumption of electricity per capita and is responsible for 3% of nations carbon emission, and only 1.5% is from electrical generation. Commenter asks what the public need is for a commercial wind facility in rural western NY. Commenter also indicates that there are more efficient ways to reduce their carbon footprint than inefficient wind turbines.	PSS Section 1.5 noted the Project Purpose, Need, and Benefit. Additional information regarding this subject will be provided in the Certificate Application.
DMM99	Tuk, J.	DMM99.2	Commenter indicates that wind turbines are not practicable, operating only in a certain wind speed range. Commenter suggests that the economics of building wind farms is not sustainable. Commenter suggests that the state and federal governments are to blame for demanding the turbines be built as a remedy for "Climate Change." Commenter asks about the viability of both the Niagara Power Project output or if that the Somerset Plant will be shut down?	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal. The Somerset Operating Plant does not meet the criteria for the state energy goal.
DMM104	Arlington, D.	DMM104.2	Commenter states the Project will not lower electric bills nor will it produce enough electricity to outweigh costs. Cited costs include cost of construction, impact on highways, and impact on relationships within the community.	Indirect lifecycle impacts and some indirect environmental impacts of wind energy arise from the manufacturing, transport, installation and operation of wind turbines, and their subsequent decommissioning. Life-cycle assessment (LCA) procedures based on ISO 14040 and ISO 14044 standards (ISO, 2006) have been used to analyze these impacts. Though these studies may include a range of environmental impact categories, LCA studies for wind energy have often been used to determine the lifecycle GHG emissions per unit of wind electricity generated (allowing for full fuel-cycle comparisons with other forms of electricity production). The results of a comprehensive review of LCA studies published since 1980 are summarized in Figure 7.18. Figure 7.18 shows that the majority of lifecycle GHG emission estimates cluster between about 8 and 20 g CO2 eq/kWh, with some estimates reaching 80 g CO2 eq/kWh. Where studies have identified the significance of different stages of the lifecycle of a wind power plant, it is clear that emissions from the manufacturing stage dominate overall lifecycle GHG emissions (e.g., Jungbluth et al., 2005). Variability in estimates stems from differences in study context (e.g., wind resource, technological vintage), technological performance (e.g., capacity factor) and methods (e.g., LCA system boundaries). In addition to lifecycle GHG emissions, many of these studies also report on the energy payback time of wind power plants (i.e., the amount of time a wind power plant must operate in order produce an equivalent amount of energy that was required to build, operate and decommission it). Among 50 estimates from 20 studies passing screens for quality and relevance, the median reported energy payback time for wind power plants is 5.4 months, with a 25th to 75th percentile range of 3.4 months to 8.5 months). From <a href="http://srren.ipcc-wg3.de/report/IPCC_SRREN_Ch07.pdf">http://srren.ipcc-wg3.de/report/IPCC_SRREN_Ch07.pdf</a> referenced from <a href="http://www.ucsusa.org/clean_energy/our-energy-choices/renewable-energy/public-benefits-of-renewable.html#.Vq97PrIrluU">http://www.ucsusa.org/clean_energy/our-energy-choices/renewable-energy/public-benefits-of-renewable.html#.Vq97PrIrluU</a>
DMM110	Bronson, C.	DMM110.2	Commenter would like to know where, what kind, and how many turbines are planned for the Project.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this comment response document.

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DMM116	Evans, K.	DMM116.2	Commenter claims the Project is not needed because production could be increased at Niagara Falls. Commenter claims the Project will not reduce CO2 emissions because fossil fuel power plants must be kept running to provide electricity when wind cannot. "When the emissions involved in building and transporting the turbines are taken into account it takes seven years of operation at full capacity to pay back the emission debt (Commenter notes this was determined in a study by the Pacific Research Institute). This means a 20 percent efficient turbine would take 35 years to become emission free, that's never."	<p>Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal. The Somerset Operating Plant does not meet the criteria for the state energy goal.</p> <p>Indirect lifecycle impacts Some indirect environmental impacts of wind energy arise from the manufacturing, transport, installation and operation of wind turbines, and their subsequent decommissioning. Life-cycle assessment (LCA) procedures based on ISO 14040 and ISO 14044 standards (ISO, 2006) have been used to analyze these impacts. Though these studies may include a range of environmental impact categories, LCA studies for wind energy have often been used to determine the lifecycle GHG emissions per unit of wind electricity generated (allowing for full fuel-cycle comparisons with other forms of electricity production). The results of a comprehensive review of LCA studies published since 1980 are summarized in Figure 7.18. Figure 7.18 shows that the majority of lifecycle GHG emission estimates cluster between about 8 and 20 g CO2 eq/kWh, with some estimates reaching 80 g CO2 eq/kWh. Where studies have identified the significance of different stages of the lifecycle of a wind power plant, it is clear that emissions from the manufacturing stage dominate overall lifecycle GHG emissions (e.g., Jungbluth et al., 2005). Variability in estimates stems from differences in study context (e.g., wind resource, technological vintage), technological performance (e.g., capacity factor) and methods (e.g., LCA system boundaries). In addition to lifecycle GHG emissions, many of these studies also report on the energy payback time of wind power plants (i.e., the amount of time a wind power plant must operate in order produce an equivalent amount of energy that was required to build, operate and decommission it). Among 50 estimates from 20 studies passing screens for quality and relevance, the median reported energy payback time for wind power plants is 5.4 months, with a 25th to 75th percentile range of 3.4 months to 8.5 months).</p> <p>From <a href="http://srren.ipcc-wg3.de/report/IPCC_SRREN_Ch07.pdf">http://srren.ipcc-wg3.de/report/IPCC_SRREN_Ch07.pdf</a> referenced from <a href="http://www.ucsusa.org/clean_energy/our-energy-choices/renewable-energy/public-benefits-of-renewable.html#.Vq97PrIrluU">http://www.ucsusa.org/clean_energy/our-energy-choices/renewable-energy/public-benefits-of-renewable.html#.Vq97PrIrluU</a></p>
DMM131	Bronson, C.	DMM131.3	Commenter would like the PSS to include more specifics regarding location and type of turbine.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected before submittal of the Certificate Application. Lighthouse Wind has provided a figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this comment response document.
DMM136	Schwabel, Pa.	DMM136.1	Commenter would like the PSS to contain information regarding turbine choices and height.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected before submittal of the Certificate Application. Lighthouse Wind has provided a figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this comment response document.
DMM141	Dudley, S.	DMM141.1	Commenter is concerned about reliability of wind turbines and a lack of demand for electricity from Huntley generating plant. Commenter would prefer to use electricity from Robert Moses hydro plant.	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal. The Somerset Operating Plant does not meet the criteria for the state energy goal.
DMM142	Howard, S.	DMM142.4	The commenter states that if the funding sources are not known, Lighthouse Wind should explain how the Project's economic viability is to be determined.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind is required to provide, in its Application, "a detailed estimate of the total capital costs of the proposed facility, including a separately stated estimate for each interconnection, broken down in a rational manner by the Applicant into major cost components appropriate to the facility," as well as the sources of information used to calculate costs. 16 NYCRR § 1001.14(a)-(c). Therefore, to the extent that Lighthouse Wind plans to seek out financial incentives, such as Renewable Portfolio Standard (RPS) funding or equivalent types of funding developed through the ongoing Renewed Energy Vision (REV) proceeding, or via state or federal renewable energy credits, which would affect the overall cost of the Project, that information would be discussed in the Certificate Application at Exhibit 14 (Cost of the Facility).

**Lighthouse Wind Project Case No. 14-F-0485**

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM142	Howard, S.	DMM142.5	The commenter asks how will the turbines be insured and certified.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As stated throughout the PSS, the Project facilities will be designed, constructed, and operated in accordance with numerable applicable standards, codes, and guidelines. Additionally, Lighthouse Wind will fully insure the Project with typical insurance coverage for the industry. Exhibit 6 of the Certificate Application will include documentation regarding third-party turbine certification.
9	Hellert, C.	9.5	Commenter notes in regards to PSS Section 2.4.1, that the PSS should disclose the actual siting of the turbines.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of Application. Lighthouse Wind has provided a figure presenting potential wind turbine buildable area based on the current, preliminary understanding of environmental and regulation constraints as Appendix C to this response document.
9	Hellert, C.	9.9	Commenter believes that there is no suitable location in the Town of Yates where proper siting can be accomplished. Commenter believes residences throughout the proposed Project areas could not accommodate industrial wind turbines.	Lighthouse Wind has provided with this comment response document, a figure presenting potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site as Appendix C to this response document. An evaluation of the potential impacts from the construction and operation of the Project to land use will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.6	Lighthouse Wind's application should include a robust disclosure and discussion of all sources of public financing, including federal tax credits and new governmentally sponsored financial instruments, with a demonstration that the manner in which project would be financed will not result in the sort of market failure identified by NYISO.	Lighthouse Wind is required to provide, in its Application, "a detailed estimate of the total capital costs of the proposed facility, including a separately stated estimate for each interconnection, broken down in a rational manner by the Applicant into major cost components appropriate to the facility," as well as the sources of information used to calculate costs. 16 NYCRR § 1001.14(a)-(c). Therefore, to the extent that Lighthouse Wind plans to seek out financial incentives, such as Renewable Portfolio Standard (RPS) funding or equivalent types of funding developed through the ongoing Renewed Energy Vision (REV) proceeding, or via state or federal renewable energy credits, which would affect the overall cost of the Project, that information would be discussed in the Application at Exhibit 14 (Cost of the Facility).
<b>Public Outreach (PSS Section 1.6 / Application Exhibit 2)</b>				
12	Smiley, A.	12.1	Commenter notes the PSS executive summary discusses public outreach activities. Commenter requests that the opinions and input from the local permanent and seasonal residents be included in the results of these activities.	It is Lighthouse Wind's intention to answer all substantive questions or concerns regarding the Project, including those from local and seasonal residents. Any additional questions left unanswered after this comment period may be asked during additional comment periods allotted within the Article 10 Application process.
16	Schwabel, P. and P.	16.4	Commenter states that there is no mention in the PSS for the creation of an oversight committee. Commenter adds that a sample of what oversight committees established to address potential wind farm issues may potentially include crop production and pollination management and the following: energy production by month & year, non-proprietary information about wind conditions, (e.g., monthly averages, high wind events, bursts, etc.), summaries of the avian monitoring program bird injuries, casualties, positive and negative impacts on area wildlife and any recommendations for changes in the monitoring programs, and citizen concerns regarding noise or other issues. Commenter asks what plans have been made to initiate such a committee.	An oversight committee is beyond the requirements of Article 10 regulations; however, a Complaint Resolution Plan will be presented in the Certificate Application and discussed in Exhibits 12, 15 and 19 to facilitate the resolution of issues and complaints that may arise within the local community. Additionally, many stipulations on the CECPN will require monitoring by various agencies.
21	Spitzer, D. (Attorney for Town of Yates)	21.3	Town requests that Lighthouse Wind continue to seek non-stakeholder input from general public concerning siting and potential impacts of Project. Commenter states that a recent survey of Town residents identified over 65% disapproval with areas of concern noted to include potential effects on nearby Niagara Falls Air Reserve Station and negative effects on wildlife. Commenter also notes that town residents expressed interest in pursuing Community Energy projects under recent PSC initiatives, whereby the local community could benefit from reduced energy costs - matching project impacts with benefits. The Town requests that the Lighthouse Wind undertake additional studies to address these concerns and/or the potential of pursuing the benefits of these programs.	As discussed in Lighthouse Wind's Public Involvement Program Plan (PIP) and Section 1.6 of the PSS, public engagement and outreach efforts are ongoing, and Lighthouse Wind fully intends to continue these efforts through the entirety of the Article 10 process, including after any Certificate is issued, during the "compliance" phase of the process. Lighthouse Wind will be required to discuss its past and ongoing public outreach efforts in the Application at Exhibit 2 (Overview and Public Involvement). Subsequent to filing the Application, Lighthouse Wind will continue its public involvement efforts, as required by Article 10. For example, Lighthouse Wind maintains a drop in office at 8691 Main Street in Barker; a Project website which is regularly updated; and local repositories for paper copies of documents such as the PIP and PSS. Lighthouse Wind has also continued to provide bimonthly reports on public outreach efforts to the Siting Board since January 2015.  As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the DOD and FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address the situation in a Socioeconomic Assessment as part of Exhibit 27 of the Certificate Application. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
26	Maid, G.	26.1	The commenter believes that Lighthouse Wind has failed to thoroughly and honestly answer questions that have been posed by the communities in the Project area. Commenter expresses that information has to be provided to the public upon request, above board, in a clear, understandable manner, in a timely fashion, to qualify as legitimate "outreach." The commenter believes Lighthouse Wind has not provided open honest community outreach.	It is Lighthouse Wind's intention to answer all material questions or concerns regarding the Project. Any additional questions left unanswered after this comment period may be asked during additional comment periods allotted within the Article 10 Application process.
49	Wolanyk, E.	49.12	Commenter indicates that PSS Appendix A incorrectly lists the 6/10/2015 Somerset Town Board Meeting as the Monthly Yates Town Board Meeting with members of Yates Town Board in attendance. The commenter also indicates the purpose of the 7 /8/2015 Somerset Town Board Meeting is incorrectly identified as the Monthly Yates Town Board Meeting with members of the Yates Town Board in attendance. The commenter expresses concern regarding the accuracy of information provided in the PSS. The commenter requests a listing of all emails, phone calls, or other communications received from the public, the Town of Somerset, and the Town of Yates along with documentation of the answer provided (or notation that no answer was provided).	<p>Upon reviewing the PIP event tracking logs you reference, clerical mistakes were identified in the event log filings regarding attendance at board meetings. Lighthouse Wind will refile these specific logs with corrections as follows:</p> <p>6/10/2015 "Somerset Town Board Meeting" entry</p> <ul style="list-style-type: none"> <li>• In "Meeting/Event Attendees" column, replace "Yates Town Board" with "Somerset Town Board"</li> <li>• In "Purpose of Meeting/Event" column replace "Monthly Yates Town Board Meeting" with "Monthly Somerset Town Board Meeting"</li> </ul> <p>7/8/2015 "Somerset Town Board Meeting" entry</p> <ul style="list-style-type: none"> <li>• In "Meeting/Event Attendees" column, replace "Yates Town Board" with "Somerset Town Board"</li> <li>• In "Purpose of Meeting/Event" column replace "Monthly Yates Town Board Meeting" with "Monthly Somerset Town Board Meeting"</li> </ul> <p>Despite these clerical mistakes, Lighthouse Wind confirms that in the months in question, Lighthouse Wind representatives did indeed attend both the Yates and Somerset town board meetings as will be described in the updated logs.</p> <p>The PIP did not commit to publishing any and all communications in regard to the Project. There have been several logs submitted to the PSC docket site and to the Lighthouse Wind website detailing the emails received and the responses provided.</p>
95	Vacco, D. (Town of Somerset)	95.17	The commenter states Lighthouse Wind has not complied with 16 NYCRR § 1000.4 (c). The commenter claims that Lighthouse Wind has failed to consult with affected agencies and stakeholders, and has engaged in pre-application activities designed to stifle rather than encourage stakeholder participation.	16 NYCRR § 1000.4 (c) requires that an Applicant's PIP include consultation with affected agencies and other stakeholders. Lighthouse Wind's PIP, filed October 31, 2015, outlines its efforts to consult with agencies and other stakeholders up to the date the PIP was filed, and its plans to continue to do so moving forward. Lighthouse Wind also files bimonthly reports recounting these efforts, and has done so since January 2015. Following the submission of this PSS Comment Response, Lighthouse Wind will also initiate the stipulations process with the parties, at which time there will be additional opportunity for affected agencies and stakeholders to come together and discuss potential stipulations on scoping and methodology.

Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.18	The commenter states that Lighthouse Wind has refused to honor the Town's request On Nov. 2, 2015 for information regarding its meetings with interested government agencies. The commenter states that Lighthouse Wind chose to view the Town's request as a FOIL request, and cited FOIL in refusing to provide the requested documents (Filing No. 113). The commenter disagrees with Lighthouse Wind's response because Lighthouse Wind is not a public entity. The commenter claims that Lighthouse Wind has acted in violation of the 16 NYCRR § 1000.4 (c) and its own PIP. The commenter requests the PSS be stricken because they claim Lighthouse Wind has failed to comply with the requisite PIP by failing to consult with stakeholders.	<p>Lighthouse Wind initiated the Article 10 process by filing a Public Involvement Program (PIP) plan in accordance with the requirements of 16 NYCRR § 1000.4. The PIP was submitted to the Siting Board on October 31, 2014. Following the receipt of comments on the PIP, the PIP was updated, finalized, and filed by Lighthouse Wind on December 31, 2014. An additional update to the PIP was filed January 15, 2015 that updated stakeholder information based upon changes in elected and appointed officials. The PIP and all other submissions under Article 10 are available online at <a href="http://www.lighthousewind.com/article10_submissions">http://www.lighthousewind.com/article10_submissions</a>. Additionally, hard copies of the PIP have been and continue to be available at four different locations that have served as document repositories in the general Project area. These include the Village of Barker Library, the Village of Lyndonville Library, the Town Hall of Somerset, and the Town Hall of Yates. Finally, a copy of the PIP is available at the Project office, located at 8691 Main Street, Barker, NY, 14012. As required by Article 10 and as set forth in the PIP, the Lighthouse Wind has been conducting stakeholder consultations with local, state, and federal agencies, the public and others in order to provide information regarding the Lighthouse Wind Project and the Article 10 process. Public outreach activities have been documented by Lighthouse Wind, and bi-monthly reports have been updated and submitted to the Siting Board since January of 2015. These reports provide details regarding the stakeholder meetings that have been ongoing, as identified in the PIP and elsewhere. In addition to the outreach component of the PIP, the Lighthouse Wind has also been engaged in soliciting feedback, comments and information from stakeholders regarding the Project Area and the Project. The information received during this stage of the process continues to inform the scoping process and the areas of inquiry for further study and evaluation. Throughout the remainder of the Article 10 process, Lighthouse Wind will continue to implement the PIP and conduct outreach activities. The PIP will also be discussed in Exhibit 2 of the Application, pursuant to the requirements of 16 NYCRR § 1001.2. The Town of Somerset has been fully engaged in and a part of this information process.</p> <p>The information regarding these stakeholder meetings has been available to the Towns on the Siting Board and Project website and any other parties seeking the information. With respect to engagement at the local level, prior to and following the submittal of the PIP, please see the response narrative for specific activities.</p> <p>Public involvement activities and stakeholder identification are ongoing. These activities will continue to be described in the event tracking logs, which are submitted on a bi-monthly basis to the Siting Board. In this way the public and other stakeholders can be fully informed on the status of consultations. The Lighthouse Wind has fully complied with 16 NYCRR 1000.4 and there has been no indication from the Siting Board of otherwise. Lighthouse Wind will continue to solicit the input of the Town of Somerset, as it has in many meetings in the past, and is available to meet with the Town to discuss any comments or questions it may have.</p>
95	Vacco, D. (Town of Somerset)	95.19	The commenter accuses Lighthouse Wind of being engaged in egregious and potentially illegal conduct designed to stifle public participation. The commenter claims, upon information and belief, that Lighthouse Wind or its agents have attempted to stifle public participation by sponsoring the "Fear not the wind" advertising campaign. The commenter further claims that through this campaign, upon information and belief, Lighthouse Wind or its agents have attempted to persuade the public to simply accept the Project without review or participation in the siting process.	As part of its ongoing PIP implementation, Lighthouse Wind has been engaged in providing the community information regarding potential impacts and benefits of wind farm projects so that the community can make informed decisions regarding the Project. The Commenter's disparaging statements aside, which require no response in this PSS response document, throughout this Article 10 proceeding, Lighthouse Wind has encouraged, and will continue to encourage the local communities' participation in this process, both supporters and opponents alike. There has been significant support for the Project throughout the local community, particularly as more information is able to be provided regarding the specifics of the Project proposal. Lighthouse Wind expects that this will continue as the studies are prepared and provided in the Application indicating how potential impacts can be avoided, minimized and mitigated.
95	Vacco, D. (Town of Somerset)	95.20	Commenter claims that Lighthouse Wind or its agents have attempted to stifle public participation by flooding the public comments portion of the DPS DMM website with form letters written, upon information or belief, by the Lighthouse Wind or its agents. The commenter states that Lighthouse Wind provides support letter templates on its website. The commenter states that, on November 20, 2015, nineteen identical letters purportedly drafted by individual members of the public were posted on the DPS website. The commenter asserts that if these comments were drafted by Lighthouse Wind or its agents, Lighthouse Wind's actions would constitute an unconscionable abuse of the Commission's public comment section. The commenter claims that, if proven, these actions appear to violate New York State Law, and could be considered illegal astroturfing as defined by the New York State Attorney General.	No response is required under the Article 10 regulations to this comment, as it is not material to the PSS. Nevertheless, the Commenter's false allegations are concerning, and appear to unfairly discount the support in the local community for the benefits associated with wind farm development, let alone the First Amendment rights of those that seek to speak out about the Project. Nevertheless, as provided for in its PIP and otherwise, Lighthouse will continue to take steps to foster public participation in the process and, through its outreach efforts, continue to solicit the input and viewpoints of the community during the remainder of the scoping phase of the Article 10 process in order to build consensus on the scope and methodologies of studies conducted to assess the potential impacts of the Project. The comments on the PSS have furthered the review process by identifying broad categories that the community is interested in learning more about, including (1) potential impacts to the Niagara Falls Airforce base (2) potential impacts to avian and bat species and (3) impacts to property values.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.21	Commenter claims that the Lighthouse Wind has failed to provide substantive responses to public questions submitted pursuant to the PIP, and has seemingly timed the filing of its PSS over the winter holiday period in a blatant attempt to suppress meaningful comment.	Lighthouse Wind agreed to an extension of time for the filing of PSS comments and, the Secretary granted extensions totaling 50 days of additional comment time over the 21 day time period set forth in the Article 10 regulations. Given the number of comments, as well as the details in some of the comments, it is clear that the public and interested stakeholders had sufficient time to provide meaningful comment on the PSS.
95	Vacco, D. (Town of Somerset)	95.22	The commenter claims that Lighthouse Wind's course of conduct is in clear violation of 16 NYCRR § 1000.4, which requires Lighthouse Wind to "seek public participation through the planning, pre-application, certification, compliance, and implementation process." The commenter claims that because the PIP has not been complied with, the PSS is premature and Lighthouse Wind should be required to resubmit the PSS after resubmitting and adhering to a valid PIP. The commenter requests that, at a minimum, the commission should prevent Lighthouse Wind from actions the commenter characterizes as stonewalling, actively discouraging public participation in the future, and engaging in deceptive practices using the Commission's public comment website.	<p>Lighthouse Wind initiated the Article 10 process by filing a Public Involvement Program (PIP) plan in accordance with the requirements of 16 NYCRR § 1000.4. The PIP was submitted to the Siting Board on October 31, 2014. Following the receipt of comments on the PIP, the PIP was updated, finalized, and filed by Lighthouse Wind on December 31, 2014. An additional update to the PIP was filed January 15, 2015 that updated stakeholder information based upon changes in elected and appointed officials. The PIP and all other submissions under Article 10 are available online at <a href="http://www.lighthousewind.com/article10_submissions">http://www.lighthousewind.com/article10_submissions</a>. Additionally, hard copies of the PIP have been and continue to be available at four different locations that have served as document repositories in the general Project area. These include the Village of Barker Library, the Village of Lyndonville Library, the Town Hall of Somerset, and the Town Hall of Yates. Finally, a copy of the PIP is available at the Project office, located at 8691 Main Street, Barker, NY, 14012. As required by Article 10 and as set forth in the PIP, the Lighthouse Wind has been conducting stakeholder consultations with local, state, and federal agencies, the public and others in order to provide information regarding the Lighthouse Wind Project and the Article 10 process. Public outreach activities have been documented by Lighthouse Wind, and bi-monthly reports have been updated and submitted to the Siting Board since January of 2015. These reports provide details regarding the stakeholder meetings that have been ongoing, as identified in the PIP and elsewhere. In addition to the outreach component of the PIP, the Lighthouse Wind has also been engaged in soliciting feedback, comments and information from stakeholders regarding the Project Area and the Project. The information received during this stage of the process continues to inform the scoping process and the areas of inquiry for further study and evaluation. Throughout the remainder of the Article 10 process, Lighthouse Wind will continue to implement the PIP and conduct outreach activities. The PIP will also be discussed in Exhibit 2 of the Application, pursuant to the requirements of 16 NYCRR § 1001.2. The Town of Somerset has been fully engaged in and a part of this information process.</p> <p>The information regarding these stakeholder meetings has been available to the Towns on the Siting Board and Project website and any other parties seeking the information. With respect to engagement at the local level, prior to and following the submittal of the PIP, please see the response narrative for specific activities.</p> <p>Public involvement activities and stakeholder identification are ongoing. These activities will continue to be described in the event tracking logs, which are submitted on a bi-monthly basis to the Siting Board. In this way the public and other stakeholders can be fully informed on the status of consultations. The Lighthouse Wind has fully complied with 16 NYCRR 1000.4 and there has been no indication from the Siting Board of otherwise. Lighthouse Wind will continue to solicit the input of the Town of Somerset, as it has in many meetings in the past, and is available to meet with the Town to discuss any comments or questions it may have.</p> <p>The Commenter's further disparaging remarks and accusations, which are untrue, are noted.</p>
102	Behnke, H. (DPS)	102.10	Commenter indicates that Lighthouse Wind should clarify that the local repositories have received paper copies of all project documents including the PSS, as well as materials presented at the open houses and through informational mailings.	The PIP and PSS have been filed at the local document repositories. Lighthouse Wind will supplement these filings with additional materials that have been at open houses. Certain materials such as large poster boards will not be at the document repositories, but are available at the local office in the Project area. Additionally these materials are available on the Project website. Further information regarding this will be addressed in the Application sections on public involvement, including Exhibit 2.
102	Behnke, H. (DPS)	102.11	The commenter requests that an updated stakeholder list (beyond Jan 2015) be included as an appendix and should identify new organizations and individuals that have expressed interest in receiving information about the Project (identified through the website, emails, correspondence, sign in sheets at events, etc.). In addition, the commenter notes the PSS indicates that Lighthouse Wind will meet/discuss the Project with numerous groups that are not on the stakeholder list, including Niagara County Historical Society, the Cobblestone Society of Orleans, Niagara County DPW and Orleans, Somerset, and Yates Highway Departments. The commenter requests that these groups be included in the revised stakeholder list.	Lighthouse Wind will revise the PIP with an updated stakeholder list.

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.12	The commenter states that DPS Staff has previously recommended that additional consultations by Lighthouse Wind personnel occur, including outreach to the Office of Parks, Recreation and Historic Preservation Office regarding potential areas of interest and guidance appropriate to development of archeological and historic resources evaluations, appropriate "Area of Potential Effect," and specific resources of interest to that agency. The commenter states that PIP reports and the PSS generally do not indicate that this outreach has occurred or been scheduled. DPS Staff reiterates its recommendation, and requests to be included in scheduling future meeting(s) with that agency for purposes of fulfilling the requirements of Parks, Recreation and Historic Preservation Law §14.09.	As reported in the Lighthouse Wind Event Tracking Log July-August 2015, a meeting with Office of Parks and the DEC was held in Albany on July 14, 2015. Additional meetings were held with local representatives of Golden Hill State Park on August 27, 2015.  The PSS identifies that consultation with the NYS Office of Parks, Recreation and Historic Preservation (referred to as SHPO) is expected regarding cultural resource surveys and assessment for the Certificate Application.
102	Behnke, H. (DPS)	102.13	DPS Staff recommend that the Niagara County and Yates County Boards of Health be added to Stakeholder list. The commenter indicates outreach and consultation should be included in Lighthouse Wind's efforts.	Lighthouse Wind will include Niagara County and Genesee-Orleans County Boards of Health to the Stakeholder list for outreach and consultation, as recommended.
102	Behnke, H. (DPS)	102.153	Regarding 16 NYCRR Section 1001.12(d) - Procedures for Addressing Public Complaints during Construction, the commenter indicates the Complaint Resolution Plan should describe how complaints, updates, and plans for resolution will be submitted to DPS Staff.	The requested information will be included in the Certificate Application, Exhibit 12 (Construction).
110	Isselhard, A.	110.9	Commenter notes that the PIP was found to be inadequate when submitted to the NYS Board on Electric Generation Siting and the Environment, as per a letter dated 12/1/2014	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. The PIP was submitted to the Siting Board on October 31, 2014. Following the receipt of comments on the PIP, the PIP was updated, finalized, and filed by Lighthouse Wind on December 31, 2014. An additional update to the PIP was filed January 15, 2015 that updated stakeholder information based upon changes in elected and appointed officials.
110	Isselhard, A.	110.10	Commenter questions if the Lighthouse Wind Open Houses were advertised in the Town's newspapers as required. Commenter also believes Open Houses were scheduled during the colder season when lakeshore residents could not easily attend.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Open Houses conducted by Lighthouse Wind were advertised as outlined in the PIP document. This includes notices in the Union Sun and Journal, Buffalo News, and Batavia Daily News.  Additionally, Lighthouse Wind hosted two "telephone town halls" to allow landowners who were not in the area an opportunity to participate in a similar style event. Furthermore, Lighthouse Wind has maintained an office with regularly posted hours since spring of 2015 so that anyone interested can visit and receive project information and give feedback. That office remains opened and invites the commenter to visit.
110	Isselhard, A.	110.11	Commenter notes that the PSS Appendices from A to E on the Project website have no text associated with them.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind has confirmed that the information posted on their website is complete and accurate. Please note that each Appendix is in Adobe PDF format and requires the document to be downloaded and viewed with a compatible software program. Additionally, the PSS and Appendices are available for download on the DPS DMM website.
110	Isselhard, A.	110.15	Commenter also states that based on current public opinion, that the Project is opposed. Commenter adds that the Town of Somerset survey results indicated 61% of the respondents were strongly opposed to Lighthouse Wind, the Somerset Town Board voted unanimously to oppose the Project, an anti-wind committee in Yates (SOS) also surveyed residents with a 77% opposed result, Town of Yates survey resulted in 66% opposed, voters in the Town of Yates voted out the incumbent Supervisor for a write-in anti-wind candidate and an anti-wind councilman, a pro-wind councilman resigned, Niagara and Orleans County legislatures resolved to oppose the Project, Congressman Chris Collins and Senator Robert Ortz have both opposed the Project, and the Great Kales Seaway Trail has also shown concern on the impacts of the Project. Commenter notes that a controversial project in Maryland has been changed to a solar energy project due to extreme public pressure, and a major change can be made in this case as well.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind is dedicated to continuing to engage the public about the Project. Lighthouse Wind has prepared and continues to implement a Public Involvement Program (PIP) plan in accordance with the requirements of 16 NYCRR § 1000.4. Throughout the scoping process, during the preparation of the Certificate Application, and throughout the remainder of the Article 10 process, Lighthouse Wind will continue to implement the PIP and conduct outreach activities. Lighthouse Wind is committed to implementing the PIP and affording for opportunities for opponents to the Project to provide comments. The Siting Board will consider all material comments submitted during the certification process.
DMM55	Boal, J.	DMM55.1	Commenter suggests that Lighthouse Wind purposefully and significantly delayed the start of open houses, but ended them on time in order to limit the people's ability to ask questions.	Open houses started at the appointed times, and ran the duration of their scheduled time. In addition to the open houses, Lighthouse Wind has kept office hours in its Barker, NY office since spring of 2015 thus, providing a continuous presence for anyone seeking information on the Project. Additionally, Lighthouse Wind has maintained a local phone number, email address and a website to provide any information that is available on the Project.
DMM72	Hellert, C.	DMM72.1	Commenter states that Lighthouse Wind's notice of address and email corrections appeared on December 10, 2015; however, that was 17 days into the time frame for commenting on the PSS. The commenter mailed comments to DPS and Lighthouse Wind on two areas of the PSS they felt inadequate. The commenter states that email to Dan Fitzgerald came back as undeliverable on every attempt. Commenter requests extension of at least 17 more business days. Commenter claims that the PSS is extremely inaccurate document and asks whether or not the public is responsible for the errors made by Lighthouse Wind and the DPS? Commenter believes the PSS was intentionally filed by Lighthouse Wind on November 23, 2015 to disrupt holidays. Commenter continues with general opposition to the Project and Lighthouse Wind.	Two hardcopy letters by the commenter dated December 9, 2015 were received by Lighthouse Wind on December 14, 2015 and are identified as Letter IDs 2 and 3. Several additional letters by the commenter have been received by Lighthouse Wind by mail and through the DPS website throughout the comment period, for which the deadline was extended January 12, 2016. The timing of the PSS submittal was based upon completion of certain project planning and availability of information. There was no intention to time this around the holidays. The PSS would have been out earlier except for an error by one of the newspapers in the publication date.

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<b>Land Use (PSS Section 2.1 /Application Exhibit 4)</b>				
5	Hellert, C.	5.1	Commenter requests Lighthouse Wind address micro-climatic effects, particularly in relation to fruit growing operations and sensitive crops in the Project area. Commenter remarks Project should not be located within 5 miles of deciduous fruit acreage and not within 5 miles of south shore of Lake Ontario where there are soils suitable for future fruit production. Commenter requests real-time studies of effects on freeze/frost events and other microclimate phenomena.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the New York State Ag. & Markets in developing the proper best management practices and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 of the Certificate Application.
16	Schwabel, P. and P.	16.2	Commenter requests that Lighthouse Wind describe their plan to compensate members of the farming communities (especially those engaged in the production of fruit crops) for their production losses and potential need to use the services of professional bee keepers if management plans fail.	As described in Sections 2.3, 2.4 and 2.11 of the PSS, a Complaint Resolution Plan will be developed for the Project and although not required by Article 10 regulations, a draft of this plan will be included in the Certificate Application (Exhibit 15) that will outline the process of how Lighthouse Wind intends to address specific complaints from the local community.
21	Spitzer, D. (Attorney for Town of Yates)	21.4	The Town of Yates requests that Lighthouse Wind consider the Town's desire to protect its natural resources, such as its Town Parks, scenic vistas, and its' goal of promoting waterfront tourism, as equally important goals within the Project planning framework.	Lighthouse Wind will review the Town of Yates' and Somerset's Local Waterfront Revitalization Plan, as well as the Western Orleans Comprehensive Plan (which includes Yates) and the Town of Somerset Comprehensive Plan, and will discuss the Project's consistency therewith. Commenters have also directed Lighthouse Wind's attention to other potentially applicable local resource and planning documents, such as the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan. Lighthouse Wind will review and discuss these documents in its exploration of local planning objectives, local resources, and consistency/mitigation to avoid adverse impacts, which will be most directly addressed in Exhibits 4 (Land Use), 20 (Cultural Resources), 24 (Visual Impacts), 27 (Socioeconomic Effects), 31 (Local Laws and Ordinances), and wherever applicable to other sections. Furthermore, Lighthouse Wind will consider broader potential impacts to natural resources in Yates and throughout the Project in Exhibits 21 (Geology, Seismology and Soils), 22 (Terrestrial Ecology and Wetlands), and 23 (Water Resources and Aquatic Ecology).
25	Hoffman, J.	25.3	Commenter claims that the construction and operation of Project is completely contrary to decades of local planning and zoning within community. Commenter states that a major goal of the Town of Somerset's Comprehensive Plan and zoning (most recently updated in 2012) is "to maintain the Rural and Agricultural Character of the Town." Commenter notes the Town of Yates Comprehensive Plan follows a similar vein. Commenter also mentions public is opposed to Project by a margin of 2 to 1 based on recent polling.	Wind Energy development has been found by many independent fact-finders, including the Department of Agriculture and the Union of Concerned Scientists ( <a href="http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI">http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI</a> ) to be an attractive and highly compatible option for farmers, since a wind use can exist alongside continued cultivation of fields on the same piece of land. Further, the income received by farmers who lease their land to wind companies assists in stabilizing the income they receive from their lands. This additional financial support has been found to be beneficial in insulating farmers from some of the volatility inherent in agricultural operations, given the potential for frequent and unpredictable market shifts and disruptions, as well as the risks inherent in raising crops or animals in any given year. The research and literature available on these benefits to agricultural landowners and communities will be discussed and substantiated with citations to existing literature in Exhibit 4 of the Application. As will be discussed and analyzed in more detail in the application, the planning documents cited by the Commenter and others, have recognized the large availability of open land and wind resource as one of the most important assets in the area. Both the Town of Yates and Somerset have specific zoning regulations providing for wind projects as a permitted use and minimize the potential impacts associated with wind projects through the implementation of the standards set forth in the zoning laws.
25	Hoffman, J.	25.4	Regarding Section 2.1 of the PSS, which states "Project operation will result in the conversion of a relatively small total area to wind related uses." Commenter claims there is insufficient information presented upon which to make this statement.	Proposed impacts to different land types and uses will be included in the Certificate Application, primarily in Exhibit 4 (Land Use).
25	Hoffman, J.	25.5	Regarding Section 2.1 of the PSS, which states "The Project may, through lease payments, allow some lands to remain in agricultural production that otherwise may not." Commenter claims that there is insufficient information presented upon which to make this statement.	Lease payments to agricultural landholders provide these individuals a stable source of income to hedge against volatility that has been experienced generally within the agricultural industry. The Certificate Application will provide a discussion of farming trends including conversion of traditional farming practices and the development of value-added activities such as Agricultural Support Businesses and Agri-Tourism. The Certificate Application will also include a discussion of how wind energy projects have been integrated into farming communities throughout New York State.
25	Hoffman, J.	25.6	Regarding Section 2.1 of the PSS, which states "Wind projects provide a potential means of reversing the trend of farm abandonment." Commenter claims that there is no evidence that farms are being abandoned; rather there is evidence to the contrary. Commenter notes that a comparison of the USDA Agricultural Census of 2007 and 2012 shows a slight increase in cropland acreage for both Niagara and Orleans counties and significant increases in the market value of all agricultural products sold when adjusted for inflation for both Counties.	Lease payments to agricultural landholders provide these individuals a stable source of income to hedge against volatility that has been experienced generally within the agricultural industry. The Certificate Application will provide a discussion of farming trends including conversion of traditional farming practices and the development of value-added activities such as Agricultural Support Businesses and Agri-Tourism. The Certificate Application will also include a discussion of how wind energy projects have been integrated into farming communities throughout New York State.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
25	Hoffman, J.	25.7	Regarding Section 2.1 of the PSS, which states "Permanent access roads... where possible follow hedge rows and field edges to minimize loss of agricultural land." Commenter claims that disturbance of miles of hedge rows for the construction of permanent access roads, the exact mileage yet to be disclosed, will result in a significant and permanent detrimental effect on the numerous forms of wildlife that reside in the hedge rows.	The technique of routing access roads along field edges is specified in the Siting Goals of the NYSA&M Guidelines for Agricultural Mitigation for Wind Power Projects as a way to avoid dividing larger fields into smaller fields, which are more difficult to farm. This technique also minimizes impacts to normal farming practices and does not necessarily eliminate hedge rows.
25	Hoffman, J.	25.8	Regarding Section 2.1 of the PSS, which states "Under no circumstances shall excess concrete be buried or left on the surface in active agricultural areas." Commenter states there is (no) mention of the effect the tons and tons of concrete, necessary for each of the foundations of each of the turbines, will have on active agricultural areas.	It is expected that construction and restoration within agricultural areas will generally follow the NYSDA&M Guidelines for Agricultural Mitigation for Wind Power Projects. Lighthouse Wind will continue to consult with NYSDA&M and the Certificate Application will include all agricultural protection and restoration measures, including any site-specific measures developed in coordination with NYSDA&M.
37	Crafts, C.	37.2	Commenter notes that the Project Area is uniquely positioned geographically with milder climate than other more southwestern NYS counties, with weather temperature buffered by the Lake, making it specifically suitable for orchardists.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 of the Certificate Application.
37	Crafts, C.	37.9	Commenter notes that Niagara County is host to the hydropower station and that Orleans County is dominated by corn agriculture with Medina being host to a corn ethanol plant. Commenter asks how much more of the area should be asked to do to help the Country to its proper energy future?	A discussion of electric system effects will be included in Exhibit 5 (Electric System Effects) of the Certificate Application.
39	Saviola, M. (NYS Ag & Markets)	39.2	Due to overall abundance of agricultural land in the Project area, NYS Ag & Markets strongly recommends that Lighthouse Wind develop and incorporate an Agricultural Monitoring Plan that provides for an independent [Agricultural] monitor to ensure that agricultural mitigation activities are properly implemented during Project construction and site restoration activities. The Agricultural Monitor must possess a working knowledge of soils, soil science, agronomy and agricultural restoration requirements as set forth by the NYSA&M (reference to Agriculture and Markets Guidelines for Wind Power Projects) and be familiar with construction activities in agricultural settings. In addition the Agricultural Monitor must be able to ensure adherence to any special conditions, construction design plans and specifications; have stop work authority and have the ability to direct contractors to make on the spot corrections when non-compliance is observed.	Lighthouse Wind will consider providing for an Agricultural Monitor during construction within Agricultural lands. If a designated Agricultural Monitor is not to be utilized, then the on-site Environmental Monitor will have a working knowledge of the requirements of construction in agricultural lands, including the NYSA&M guidelines for Wind Power Projects as well as specific agricultural restoration and mitigation techniques.
39	Saviola, M. (NYS Ag & Markets)	39.3	NYS Ag & Markets indicates that much of the Project is underlain by lacustrine soils which may require slight deviation from the typical sequence of subsoil decompaction and deep shattering during agricultural restoration. In addition, much of the site is underlain by platy shale and poorly sorted fragments of sandstone and limestone. Special provisions for excess rock removal and disposal and supplemental backfill material in agricultural lands will be required as no rock can be backfilled to within two feet of the top of the subsoil working surface. This requirement is intended to prevent waste rock migration to the soil surface with each subsequent yearly freeze/thaw cycle. Waste rock content will need to be closely planned for and monitored by the Agricultural Monitor.	The site-specific information regarding soils is appreciated. Site soils and geology will be further analyzed and discussed at greater length within the Certificate Application. Lighthouse Wind anticipates compliance with NYSA&M guidelines in order to minimize impacts on agricultural land and farming practices. Waste rock will be monitored and planned for on-site and will not be used to backfill within the top two feet of subsoil working surface within agricultural areas. Geotechnical investigations will be completed at the proposed turbine sites and any soils which might be encountered as potentially requiring special restoration techniques will be identified and planned for.
39	Saviola, M. (NYS Ag & Markets)	39.4	NYS Ag & Markets recommends that Lighthouse Wind contact each County Soil & Water Conservation District office, the offices of the USDA Natural Resources Conservation Service (NRCS) as well as each affected farm owner and/or operator to determine the location of potential drainage features along with other potential conservation practices which may be permanently impacted by Project facilities—particularly areas in agricultural fields where excavation is required. Work associated with the implementation of these types of conservation practices is usually documented in the form of "as-built" drawings in agency "cooperator files" for each participating farmer. Department staff are willing to assist the Lighthouse Wind in identifying individual farms and individual crop fields where engineered conservation practices and/or drainage features have been installed.	Lighthouse Wind will consult with the County Soil and Water Conservation District offices, USDA Natural Resources Conservation Service offices, the NYSDA&M, and each affected farm owner/operator to determine the location of engineered conservation practices and/or drainage features that have been installed.
39	Saviola, M. (NYS Ag & Markets)	39.5	It is recommended that field visits be done in conjunction with NYS Ag & Markets staff prior to the submission of the final Application.	Field visits with Department staff are anticipated prior to submission of the Certificate Application.
49	Wolanyk, E.	49.13	Regarding PSS Section 2.1.1 pages 9 and 10, commenter indicates that airfields are not identified in the PSS description of the existing setting. The Towns of Yates and Somerset have airstrips on FAA maps. Commenter also indicates that Krull Park should be listed and described as within 5 miles of the Project site and includes a water spray park, swimming, picnicking, and site for large community and fundraising events such as the, Polar Bear Plunge, Pirate Festival and Celtic Festival, etc. Also mentions that there are two Christian camps and several wineries in area and the possible impact on these areas needs to be addressed.	A preliminary list of area airfields is included in PSS Section 2.10.1. A Project layout will be provided to the FAA for comprehensive study of potential impacts to such facilities, in accordance with federal requirements. The results of the FAA analysis will be included in Exhibit 25 (Effect on Transportation) of the Certificate Application.  Krull Park and all other parks, designated trails, public-access fishing areas, and community and municipal facilities within the study area will be included in mapping for the Certificate Application.
49	Wolanyk, E.	49.15	Commenter is concerned about impacts on roads from transportation of concrete, gravel, cranes, and turbine components. Commenter is also concerned about alterations made to roads to allow tower components to turn corners.	Potential road use impacts are discussed in PSS Section 2.10 and specific impacts, avoidance and minimization, and mitigation measures will be included in Exhibit 25 (Effect on Transportation) of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
49	Wolanyk, E.	49.18	The commenter is concerned about impacts from staging areas and the permanent substation.	Staging area and substation locations will be depicted on a Project layout map in the Certificate Application. Any impacts resulting from these components will be included in the appropriate Exhibits [e.g., Exhibit 4 (Land Use), Exhibit 19 (Noise and Vibration), Exhibit 20 (Cultural Resources), etc.].
49	Wolanyk, E.	49.20	Regarding PSS Statement: "It is expected that the Project will operate in compliance with local zoning ordinances and that the Project may, through lease payments, allow some lands to remain in agricultural production that otherwise may not." Commenter claims that that the statement is misleading the state to believe that this is a marginal, poverty stricken rural area. Commenter goes on to say that Lighthouse Wind infers the land is marginal as are the farming operations that make use of it. Commenter notes that dairy farms in these towns have expanded, and fruit farms are expanding to wineries and farm markets. Commenter states Mennonite and Amish families have moved into the town of Yates and are farming successfully, increasing their holdings and retail operations to include bulk food stores, meat markets and greenhouses as well and roadside markets. Commenter states corn and soybean production has increased to meet the needs of biofuels facility in Albion. The commenter indicates farmland is of high quality, in demand, and in no danger of it going out of production. Commenter states that only marginal lands are being taken out of production across New York State and in this area lands that have not been farmed for years are being cleared and planted.	Wind Energy development has been found by many independent fact-finders, including the Department of Agriculture and the Union of Concerned Scientists ( <a href="http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI">http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI</a> ) to be an attractive and highly compatible option to farmers, since a wind use can exist alongside continued cultivation of fields on the same piece of land. Further, the income received by farmers who lease their land to wind companies assists in stabilizing the income they receive from their lands. This additional financial support has been found to be beneficial in insulating farmers from some of the volatility inherent in agricultural operations, given the potential for frequent and unpredictable market shifts and disruptions, as well as the risks inherent in raising crops or stock in any given year. The research and literature available on these benefits to agricultural landowners and communities will be discussed and substantiated with citations to existing literature in Exhibit 4 of the Application.
49	Wolanyk, E.	49.21	Regarding PSS Statement: "Wind projects provide a potential means of reversing the trend of farm abandonment and preserving the rural/agricultural character of many areas." Commenter claims this statement is misleading for the reasons listed above and states that farms are not being abandoned in the study area.	A lease payment to agricultural landholders provides these individuals a stable source of income to hedge against volatility that has been experienced generally within the agricultural industry. The Certificate Application will provide a discussion of farming trends including conversion of traditional farming practices and the development of value-added activities such as Agricultural Support Businesses and Agri-Tourism. The Certificate Application will also include a discussion of how wind energy projects have been integrated into farming communities throughout New York State.
49	Wolanyk, E.	49.22	Regarding PSS Statement: "In this way, a wind project use is not only compatible with the existing land uses in much of the Project area, but also enhances the existing land uses by increasing the productive value of land per acre, while coexisting with ongoing agricultural use of those acres, and aiding landowners in making continued agricultural use of those areas more financially sustainable." Commenter claims that this statement is questionable as it is yet to be determined if Project will increase agricultural land values. The commenter states the impact on farming areas are yet to be seen and does not believe this statement is justifiable.	A lease payment to agricultural landholders provides these individuals a stable source of income to hedge against volatility that has been experienced generally within the agricultural industry. The Certificate Application will provide a discussion of farming trends including conversion of traditional farming practices and the development of value-added activities such as Agricultural Support Businesses and Agri-Tourism. The Certificate Application will also include a discussion of how wind energy projects have been integrated into farming communities throughout New York State.
50	Atwater, R.	50.4	Commenter request Lighthouse Wind include a map of all publicly known proposed land uses within the study area, gleaned from interviews with state and local planning officials, from the public involvement process, or from other sources.	The requested mapping (as applicable to the Project) will be provided in Exhibit 4 of the Certificate Application as described in PSS Section 2.1.3 and required by 16 NYCRR § 1001.4 (f).
50	Atwater, R.	50.6	Commenter requests that Lighthouse Wind include maps showing recreational and other land uses within the study area that might be affected by the sight, sound or odor of the construction or operation of the facility, interconnections and related facilities, including Wild, Scenic and Recreational River Corridors, open space, and any known archaeological, geologic, historical or scenic area, park, designated wilderness, forest preserve lands, scenic vistas specifically identified in the Adirondack Park State Land Master Plan, conservation easement lands, scenic byways designated by the federal or state governments, nature preserves, designated trails, and public-access fishing areas; major communication and utility uses and infrastructure; and institutional, community and municipal uses and facilities; including a summary describing the nature of the probable environmental impact of facility and interconnection construction and operation on such uses, including an identification of how such impact is avoided or, if unavoidable, minimized or mitigated.	Lighthouse Wind is required to provide an overview and analysis of the uses noted by commenter as part of its submission for Exhibit 4. Lighthouse Wind can also provide figures showing mapping of relevant resources as part of its Application submission, as requested. Please note that some of the information discussed, such as scenic vistas identified in the Adirondack State Land Master Plan, do not apply to this Project, as the Project is not within the geographical area covered by the Adirondack State Land Master Plan.
50	Atwater, R.	50.7	Commenter requests that Lighthouse Wind include a qualitative assessment of the compatibility of the facility and any interconnection, including any offsite staging and storage areas, with existing, proposed and allowed land uses, and local and regional land use plans, within a 1-mile radius of the facility site and any interconnection route. The qualitative assessment shall include an evaluation of the short- and long-term effects of facility-generated noise, odor, traffic and visual impacts on the use and enjoyment of those areas for the current and planned uses. The assessment shall identify the nearby land uses of particular concern to the community, and shall address the land use impacts of the facility on residential areas, schools, civic facilities, recreational facilities, and commercial areas.	This information (as applicable to the Project) will be provided in Exhibit 4 of the Certificate Application as described in PSS Section 2.1.3 and required by 16 NYCRR § 1001.4 (i).
52	Pellicano, S.	52.2	Commenter indicates that they are unable to assess how far away the turbines will be from their property, as that information has not been disclosed by Lighthouse Wind.	The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application filing. Lighthouse Wind has provided a figure presenting potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site as Appendix C to this response document.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.23	Lighthouse Wind states more than once that "industrial uses" are "interspersed through the Project area." i.e. PSS at p. 9. Commenter indicates that this statement is simply false and should be removed to avoid confusion.	Lighthouse Wind respectfully disagrees with the comment. Based on initial review of land use in the area, Lighthouse Wind accurately identifies several industrial uses, including an active CSX-owned railroad, the Somerset Operating power plant, and a roadway network in the Project area. Additional commercial and industrial developments are concentrated around neighboring villages and hamlets.
95	Vacco, D. (Town of Somerset)	95.24	Commenter requests Lighthouse Wind identify how land uses will be identified and mapped in the Project area and in the area surrounding the Project area and to what distance land use will be mapped. Additionally, Somerset's town engineer opines that the Project is in direct conflict with Somerset's Comprehensive Plan. Exhibit 9. The town engineer also recommends that other regional Comprehensive Plans be identified and evaluated against the Project. Such plans include the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan. Exhibit 9.	Lighthouse Wind will review the Town of Yates' and Somerset's Local Waterfront Revitalization Plan, as well as the Western Orleans Comprehensive Plan (which includes Yates) and the Town of Somerset Comprehensive Plan, and will discuss the Project's consistency therewith. Commenters have also directed Lighthouse Wind's attention to other potentially applicable local resource and planning documents, such as the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan. Lighthouse Wind will review and discuss these documents in its exploration of local planning objectives, local resources, and consistency/mitigation to avoid adverse impacts, which will be most directly addressed in Exhibits 4 (Land Use), 20 (Cultural Resources), 24 (Visual Impacts), 27 (Socioeconomic Effects), 31 (Local Laws and Ordinances), and wherever applicable to other sections. Furthermore, Lighthouse Wind will consider broader potential impacts to natural resources in Yates and throughout the Project in Exhibits 21 (Geology, Seismology and Soils), 22 (Terrestrial Ecology and Wetlands), and 23 (Water Resources and Aquatic Ecology).
95	Vacco, D. (Town of Somerset)	95.E9.4	Commenter requests that Lighthouse Wind remove the statement about industrial uses being interspersed throughout the Project area.	Lighthouse Wind respectfully disagrees. Based on initial review of land use in the area, Lighthouse Wind accurately identifies several industrial uses, including an active CSX-owned railroad, the Somerset Operating power plant, and a roadway network in the Project area. Additional commercial and industrial developments are concentrated around neighboring villages and hamlets.
95	Vacco, D. (Town of Somerset)	95.E9.5	Commenter would like Lighthouse Wind to identify how land uses will be identified and mapped in the Project area and in the area surrounding the Project area and to what distance will they be mapped. The commenter believes the statement in the PSS that the "Project is expected to be largely compatible with the land uses in and around the Project site, based on the provisions of the Comprehensive Plan and zoning laws" should be removed until information and analysis is provided supporting this statement.	Lighthouse Wind will use tax parcel data with land use classifications (New York Office of Real Property Services (NYSORPS) categorization) available from the county governments will be used in the Certificate Application. Where such classifications are overly broad or unrepresentative, such as Vacant Land, a more representative classification will be provided based upon on-site observations. This will be mapped within the Project boundary. The predominant land use of the area is agricultural. Wind Energy development has been found by many independent fact-finders, including the Department of Agriculture and the Union of Concerned Scientists ( <a href="http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI">http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI</a> ) to be an attractive and highly compatible option for farmers, since a wind use can exist alongside continued cultivation of fields on the same piece of land. The research and literature available on these benefits to agricultural landowners and communities will be discussed and substantiated with citations to existing literature in Exhibit 4 of the Application. As will be discussed and analyzed in more detail in the application, the planning documents cited by the Commenter and others, have recognized the large availability of open land and wind resource as one of the most important assets in the area. Both the Town of Yates and Somerset have specific zoning regulations providing for wind projects as a permitted use and minimize the potential impacts associated with wind projects through the implementation of the standards set forth in the zoning laws.
95	Vacco, D. (Town of Somerset)	95.E9.6	Commenter asks, "How will the Goals and Objectives of the Town's Comprehensive Plan and the vision of the community be evaluated against the Project? How will this Project help the Town achieve its vision and implement the Plan or how will it inhibit the Town reaching its goals? As Town Planner and author of the Plan, it should be noted that it is commenters opinion that the Project will not support the Plan's vision and is actually in direct conflict with the Plan (for example; the Agri-tourism area of the Plan will be negatively impacted and the overall rural character of the Town will be permanently changed)."	Lighthouse Wind will review the Town of Yates' and Somerset's Local Waterfront Revitalization Plan, as well as the Western Orleans Comprehensive Plan (which includes Yates) and the Town of Somerset Comprehensive Plan, and will discuss the Project's consistency therewith. Commenters have also directed Lighthouse Wind's attention to other potentially applicable local resource and planning documents, such as the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan. Lighthouse Wind will review and discuss these documents in its exploration of local planning objectives, local resources, and consistency/mitigation to avoid adverse impacts, which will be most directly addressed in Exhibits 4 (Land Use), 20 (Cultural Resources), 24 (Visual Impacts), 27 (Socioeconomic Effects), 31 (Local Laws and Ordinances), and wherever applicable to other sections. Furthermore, Lighthouse Wind will consider broader potential impacts to natural resources in Yates and throughout the Project in Exhibits 21 (Geology, Seismology and Soils), 22 (Terrestrial Ecology and Wetlands), and 23 (Water Resources and Aquatic Ecology). The Application will look at specific statements, goals and policies set forth in the cited plans and will identify how the Project assists the local communities in achieving these goals and/or how the Project is consistent with these policies.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E9.7	Commenter states that other Regional Comprehensive Plans should be identified and evaluated against the Project. These plans include the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan to name a few.	Lighthouse Wind will review the Town of Yates' and Somerset's Local Waterfront Revitalization Plan, as well as the Western Orleans Comprehensive Plan (which includes Yates) and the Town of Somerset Comprehensive Plan, and will discuss the Project's consistency therewith. Commenters have also directed Lighthouse Wind's attention to other potentially applicable local resource and planning documents, such as the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan. Lighthouse Wind will review and discuss these documents in its exploration of local planning objectives, local resources, and consistency/mitigation to avoid adverse impacts, which will be most directly addressed in Exhibits 4 (Land Use), 20 (Cultural Resources), 24 (Visual Impacts), 27 (Socioeconomic Effects), 31 (Local Laws and Ordinances), and wherever applicable to other sections. Furthermore, Lighthouse Wind will consider broader potential impacts to natural resources in Yates and throughout the Project in Exhibits 21 (Geology, Seismology and Soils), 22 (Terrestrial Ecology and Wetlands), and 23 (Water Resources and Aquatic Ecology).
95	Vacco, D. (Town of Somerset)	95.E9.8	Commenter indicates that the Land Use section of the PSS identifies, in general, the agricultural components of the Project area, but does not offer a methodology on how to study the impacts of the Project on agriculture. Commenter notes the Town Wind Energy committee's recommendation/report includes study requirements including the study of the impact on "air drainage". The commenter claims statements about being in compliance with local zoning and the support of agricultural protection must be removed from the PSS, because this would need to be substantiated in the studies.	In accordance with 16 NYCRR § 1001.22 (q), Exhibit 22 (Terrestrial Ecology and Wetlands) of the Certificate Application will include an analysis of the temporary and permanent impacts of the construction and operation of the facility and the interconnections on agricultural resources, including the acres of agricultural land temporarily impacted, the number of acres of agricultural land that will be permanently converted to nonagricultural use, and mitigation measures to minimize the impact to agricultural resources.  As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential microclimatic impacts, if any, from the operation of the Project. Lastly, Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 of the Certificate Application. Lighthouse Wind will also provide a more general discussion of the compatibility of existing land uses in and around the proposed Project Area with the proposed Project, as required by Exhibit 4.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.14	Commenter indicates that effects from industrial wind turbines on bats are also an agricultural and LWRP issue, not just a wildlife issue. Commenter cites LWRP Policy 26 which calls for actions to conserve and protect agricultural lands in the State's coastal area. Commenter suggests Great Lakes Shoreline regions have an abundance of migrating and resident bat species that provide valuable ecological services to the County agricultural lands. Commenter notes that several species of bats have been negatively impacted by White Nose Syndrome. Commenter claims that wind turbines have caused higher mortality rates of bats due to collision with the blades or the pressure from the blades. Commenter adds that pesticide use will increase if bat populations decline and are unable to control insect populations.	Bat risk is carefully evaluated and addressed in coordination with NYSDEC and USFWS, and will be included in the Certificate Application. However, studies on impacts to insect populations extend beyond the scope of the Article 10 regulations and have not been requested by the agencies.
102	Behnke, H. (DPS)	102.14	The PSS states that the "Golden Hill State Park ... is located within the Project site" (PSS, page 10). Commenter indicates that this statement is probably incorrect and indicative of the problem with terminology. Referring to PSS Figure 2 – Study Area, this map indicates that Golden Hill State Park is located outside of and adjacent to the "Study Area." Pursuant to the definition at 16 NYCRR §1000.2 (are), the study area for the proposed Lighthouse Wind power facility "shall generally include the area within a radius of at least five miles from all generating facility components." So, while Golden Hill State Park should be reported as being outside of the "Project Area" or the "Project site," it should be identified as within the five mile "Study Area" (rather than the "5-mile buffer" as indicated at PSS Figure 3).	The commenter is correct. The statement "Golden Hill State Park...is located within the Project site" (PSS, page 10) is in error. As noted by the commenter, Golden Hill State Park is outside the Project site, but within the Study Area.
102	Behnke, H. (DPS)	102.15	Commenter requests that a Revised Scoping Statement include consideration of impacts on recreational uses of Golden Hill State Park (and other recreational areas within the Study Area, as appropriate) and report on objective criteria and analysis including Park uses, usage data, facility management plans, and interviews with park managers, and perhaps Park user surveys. In addition, the commenter states the report should include an analysis of sensitivities to facility construction and operational impacts including noise and vibration, visibility and visual impacts, traffic, dust, and potentially deleterious effects of Project construction-period water quality degradation in Golden Hill Creek.	In accordance with 16 NYCRR § 1001.4 (h) the Certificate Application will include a summary describing the nature of any potential environmental impacts to uses of Golden Hill State Park and other recreational areas within the study area. This summary will be informed by the results of the topic-specific studies proposed in the PSS (e.g., noise impact analysis, visual impact analysis, wetland and stream delineation and impact calculations, etc.). Lighthouse Wind will continue to consult with park and recreational area management to identify and address specific concerns.

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102	Behnke, H. (DPS)	102.16	Commenter requests that the Project Scope address specific aspects of the New York State Open Space Plan (OSP) as related to the proposed Project site and regional setting. The commenter states the scope should include outreach to planning agencies regarding specific proposals and issues identified in OSP 2014: (1) Priority Project {89} "Lake Ontario and Lake Erie Shoreline and Islands and Niagara River". Describe and discuss project consistency with plan objectives and components. (2) "State Park & State Historic Site Protection" "State Parks and Historic Sites provide valuable natural, cultural and recreation resource that are enjoyed by millions of visitors each year. Protection and enhancement of the existing parks and historic sites is critical to long term stewardship of these resources. It is important to improve access, eliminate in-holdings and provide buffers to protect the resources as well as to enhance recreational and cultural opportunities."	The Certificate Application will address consistency with the 2014 New York Open Space Plan (OSP). Lighthouse Wind will seek input from regional and local planning agencies such as the Genesee/Finger Lakes Regional Planning Council, the Niagara County Center for Economic Development, and the Orleans County Department of Planning and Development.
102	Behnke, H. (DPS)	102.17	DPS Staff notes that the only specifically identified location of proposed Lighthouse Project facilities, as reported in the PSS, is the electrical point of interconnection proposed to be located at the Somerset switchyard, located within the site of the Somerset Power Plant. DPS Staff advises that for any project development proposal involving lands of the Somerset Power Plant, an evaluation of the requirements of the Certificate of Environmental Compatibility and Public Need (CECPN) issued pursuant to PSL Article VIII in Case 80002 on December 29, 1978, and any approved Compliance Plans or environmental protection measures, must be provided, including but not limited to: the Somerset Power Plant Multiple Use Plan; visual protection measures and screening areas; and noise limits and noise buffer areas acquired as part of the power plant project development. (NOTE: To the extent that the Lighthouse Project layout may affect lands included in the Somerset Power Plant site, amendment of the Somerset CECPN or development of additional Compliance Plans in conformance with the CECPN requirements may be necessary for review and consideration by the Siting Board and the Department of Public Service.)	Lighthouse Wind will review the Somerset CECPN documents in Case 80002 (December 29, 1978). Lighthouse Wind proposes to address this comment in further detail during consultations with DPS Staff.
102	Behnke, H. (DPS)	102.18	DPS Staff notes that the interconnection to the Somerset switchyard may affect design details of the 345 kV transmission facilities of NYSEG., as certified pursuant to PSL Article VII by the NYS Public Service Commission, and is likely to require an amendment to the CECPN issued by the PSC in Case 27313; and modification of Environmental Management and Construction Plans for facilities constructed pursuant to that CECPN. DPS requests Scoping Statement be modified accordingly to identify additional permits, approvals or reviews necessary for the proposed Lighthouse Project. Furthermore, there is no mention of the existing transmission line in terms of it being a significant land use, and a critical infrastructure facility, within the Project Area. (PSC established a standard 1.5 X maximum wind turbine blade tip height setback distance from transmission lines operating at 115 kV or greater which should apply to project planning and Scoping Statement development.)	Lighthouse Wind will consult with DPS Staff regarding the applicability of Article VII and the need for any amendments to the existing CECPN for the Somerset facility and will identify the results of those consultations in the Application. The Land Use section of the Application will recognize the major electric transmission facility and Lighthouse Wind anticipates complying with the 1.5 x setback distance to wind turbine locations.
102	Behnke, H. (DPS)	102.19	Commenter requests that the review of project conformance with municipal comprehensive plans be expanded to include in-depth analysis of Niagara County and Orleans County planning documents, as well as analysis of the full text and attachments of the Comprehensive Plans of the Towns of Somerset and Yates.	Lighthouse Wind will review the Town of Yates' and Somerset's Local Waterfront Revitalization Plan, as well as the Western Orleans Comprehensive Plan (which includes Yates) and the Town of Somerset Comprehensive Plan, and will discuss the Project's consistency therewith. Commenters have also directed Lighthouse Wind's attention to other potentially applicable local resource and planning documents, such as the Niagara Communities Plan, the Regional Framework for Growth, the WNY Sustainability Plan, and the Regional Economic Development Plan. Lighthouse Wind will review and discuss these documents in its exploration of local planning objectives, local resources, and consistency/mitigation to avoid adverse impacts, which will be most directly addressed in Exhibits 4 (Land Use), 20 (Cultural Resources), 24 (Visual Impacts), 27 (Socioeconomic Effects), 31 (Local Laws and Ordinances), and wherever applicable to other sections. Furthermore, Lighthouse Wind will consider broader potential impacts to natural resources in Yates and throughout the Project in Exhibits 21 (Geology, Seismology and Soils), 22 (Terrestrial Ecology and Wetlands), and 23 (Water Resources and Aquatic Ecology).
102	Behnke, H. (DPS)	102.20	Commenter indicates that the Town of Somerset Comprehensive Plan 2012 Update includes attachments reflecting recommendations applicable to areas and activities within the proposed Lighthouse Wind Project Area: Protection of important environmental resources; lakeshore overlay district and preservation of views (coordinated with the LWRP); Watershed studies including protecting and improving water quality; working with the Soil and Conservation service and their CEM (Community Environmental Management) program; for identified streams (especially Golden Hill Creek), a stream protection overlay should be created. This zoning overlay would require development within its boundaries to meet structure regulations for setbacks from the creek, drainage and erosion control, and other issues such as watershed protection. Commenter states that based on watershed studies and possible assistance under a CEM program, that Lighthouse Wind should determine those areas of the Town that need detailed drainage studies. Indicates Scoping Document should address consistency of the Project proposal with these and related planning objectives as identified in Town planning documents.	The Town of Somerset Comprehensive Plan 2012 Update and the Western Orleans Comprehensive Plan 2003 will be used as resources during the development of a Project layout and an assessment of compliance with these plans will be included in the Certificate Application. Regarding the referenced recommended implementation actions: To the extent the Towns have implemented the recommended programs or performed the outlined studies/data collection, Lighthouse Wind will assess consistency with these programs and/or incorporate study data and conclusions into the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.21	DPS Staff advises that the relevant municipal Local Waterfront Revitalization Plan (LWRP) should be considered as an adjunct to the Comprehensive Plans, in that additional planning and resource protection goals specific to Coastal Areas are identified. Demonstration of project design in conformance with substantive standards of local laws applicable to locations within designated Coastal Areas is advised to avoid inconsistency with applicable coastal policy provisions.	Lighthouse Wind will consult with the Towns of Yates and Somerset, as well as the NYSDOS, to identify any specific LWRP policy concerns and will supply the requested information, suitable for a consistency determination, in the Certificate Application.
102	Behnke, H. (DPS)	102.24	Regarding PSS statement that the Project "may provide a potential means of reversing the trend of farm abandonment and preserving the rural/agricultural character" (PSS page 13). Commenter indicates this is subjective and should be developed into a subject of study for supporting the Project application. The commenter indicates the application should include an analysis of the amount of farmland conversion within the Project Area that has occurred in recent years; along with analysis of the expansion of farmlands, the types of development of agricultural and related value-added activities (such as goals of developing Agricultural Support Businesses and Agri-Tourism as identified in Town of Somerset Comprehensive Plan 2012 update); and information regarding the conversion of traditional farming practices to Concentrated Animal Feeding Operations.	The Certificate Application will provide a discussion of farming trends including conversion of traditional farming practices and the development of value-added activities such as Agricultural Support Businesses and Agri-Tourism. The Certificate Application will include a discussion of how wind energy projects have been integrated into farming communities throughout New York State.
102	Behnke, H. (DPS)	102.25	Commenter indicates that the PSS does not propose a land use classification scheme for the analysis of Project Area land uses. Commenter notes this is a fundamental element in devising land use analysis to be undertaken and reported in an Application. Commenter requests that an appropriate scheme should be proposed, with supporting criteria and description of applicability to the Project Area provided in a Revised Scoping Statement. Commenter indicates a land use classification scheme that comports with land use planning documents of the municipalities within the Project Area should be proposed. DPS Staff advises that "vacant" lands typically have other specific uses, such as recreational, hunting, forestry and wildlife management, pasture, conservation reserve, etc., that can be identified in consultation with landowners.	Tax parcel data with land use classifications (New York Office of Real Property Services (NYSORPS) categorization) available from the county governments will be used in the Certificate Application. Where such classifications are overly broad or unrepresentative, such as Vacant Land, a more representative classification will be provided based upon on-site observations.
102	Behnke, H. (DPS)	102.26	Commenter notes that municipal goals reported in planning documents include promoting residential and other development in areas that are located along corridors traversed by public water and wastewater lines. Commenter requests that these existing infrastructure locations be identified and mapped, and Project Layout should account for and avoid conflicts with this (and other areas of) potential development and build-out as envisioned and recommended in planning documents. DPS Staff recommends consultation with municipal officials and planning boards in this regard. The Town of Somerset Comprehensive Plan Update 2012 identifies an area for encouraging future residential development in an area adjacent to the Village of Barker and within the existing sewer district, designated as the "Expanded Village" on the plan "Vision Map."	Lighthouse Wind will consult with local officials to determine this information for the Certificate Application.
102	Behnke, H. (DPS)	102.27	Commenter requests that the location of all public lands in the Project Area (and 5 Mile Study Area) be mapped, identified and catalogued, including schools, cultural sites, museums, parks, cemeteries, water supply and wastewater treatment facilities, municipal halls, libraries and historic society collection sites, etc.	The requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.28	Commenter requests that Project layout and location of component facilities be provided early in the Project planning stages for development of stipulations regarding Article 10 application contents, and for consideration of appropriate resource impacts and development of alternatives, impact avoidance measures, and appropriate mitigation measures.	The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site as Appendix C to this response document.
102	Behnke, H. (DPS)	102.29	Commenter indicates that forest land impacts are not addressed in the discussion in part 2.1.4. Siting of turbines, access roads, and electric line corridors in forested areas will result in permanent loss of forest land and conversion of uses to utility-wind energy facilities.	The Project will utilize previously disturbed areas, and avoid forested areas, for the placement of turbines, access roads, and interconnect routes to the maximum extent possible. Any anticipated impacts to forest land will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.30	DPS indicates Project-related electric line and substation facilities needed are not well described in the PSS. The location, size and configuration of the needed substation and any interconnection transmission lines have not been identified in the PSS; therefore it is not possible to identify land use or other siting conflicts or impacts of these Project components, or to suggest alternative locations or configurations for analysis specifically at this time. If the interconnection between the Project substation (including step-up transformers) and the existing switchyard and 345 kV line exceeds one mile in distance, then the transmission facility proposed would be subject to PSL Article VII for a major electric transmission facility. Identification of location, size and general component description, and an assessment of land use compatibility and impacts for the substation and any transmission line, should be specified in the Revised Scoping Document.	More detail in regard to the interconnection substation will be provided in the Certificate Application. It is currently not anticipated that the interconnection between the Project substation and the interconnection point will exceed 1 mile.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response								
102	Behnke, H. (DPS)	102.31	Commenter indicates that Subsection 2.1.4 of the PSS is limited to a discussion of traditional agricultural land impacts but should be expanded to address other land uses including those identified in DPS Staff's comments on land uses, which include recreational resources, existing residences and potential residential and other developments, forested land conversions, etc. Furthermore, the details of an existing land use analysis have not yet been completed. The Town of Somerset Comprehensive Plan identifies areas for resource protection, recreational and residential development, and development of both Agricultural Support Businesses and Agricultural Tourism. Project planning efforts must address these provisions, as well as similar planning interests identified in Town of Yates planning documents, in detail and demonstrate that appropriate land use plans and initiatives are considered, and Project Layout avoids conflicts with these objective land use plans and community goals.	The Certificate Application will include the requested information.								
102	Behnke, H. (DPS)	102.32	DPS indicates scoping documents should identify land use and land use planning avoidance areas within the Project Area outline to demonstrate that existing uses, planned uses, and identified planning goals are accommodated by Project layout. Specific setback distances should be identified based on objective criteria and relevant standards.	The Certificate Application will include the requested mapping information consistent with the requirements of 16 NYCRR § 1001.4. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site as Appendix C to this response document.								
102	Behnke, H. (DPS)	102.33	DPS Staff requests that the Scoping Statement include a Siting Constraints Map, which shows setback distances from existing roads, buildings, property lines, residences and businesses, or non-participating properties, wetlands, etc., to help visualize where turbines might be proposed to be located.	Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints within the entire PSS Project site as Appendix C to this response document. Lighthouse Wind has also provided a figure demonstrating the setback distances in which the Project must comply as Appendix D to this response document.								
103	Edick, R (NYSDEC)	103.3	Before commencing construction activity, the owner or operator of a construction project that will involve soil disturbance of one or more acres must obtain coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity. To gain coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity, an owner or operator must develop a SWPPP and Submit a completed NOI. NYSDEC requests Lighthouse Wind work closely with the regional water engineer in finalizing an acceptable SWPPP. Appropriate contacts:  <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Region 8</td> <td style="width: 50%;">Region 9</td> </tr> <tr> <td>Scott Rodabaugh</td> <td>Jeff Konsella</td> </tr> <tr> <td>6274 E. Avon-Lima Road</td> <td>270 Michigan Avenue</td> </tr> <tr> <td>Avon, New York 14414</td> <td>Buffalo, New York 14203</td> </tr> </table>	Region 8	Region 9	Scott Rodabaugh	Jeff Konsella	6274 E. Avon-Lima Road	270 Michigan Avenue	Avon, New York 14414	Buffalo, New York 14203	Lighthouse Wind anticipates coordination with the applicable regional water engineer in development of the Project Stormwater Pollution Prevention Plan (SWPPP) and submittal of the Project Notice of Intent (NOI). A preliminary SWPPP will be incorporated into Exhibit 23 of the Certificate Application as required under Article 10 regulations.
Region 8	Region 9											
Scott Rodabaugh	Jeff Konsella											
6274 E. Avon-Lima Road	270 Michigan Avenue											
Avon, New York 14414	Buffalo, New York 14203											
103	Edick, R (NYSDEC)	103.4	Commenter indicates an environmental monitoring plan should be prepared that provides for qualified independent monitor(s) to ensure that environmental regulatory conditions and mitigation activities are properly applied during project construction and site restoration activities.	Pursuant to local, state, and or national environmental laws and in conjunction with the preparation of a Project SWPPP, Lighthouse Wind will develop plans and procedures for environmental monitoring and will provide those as part of the preliminary SWPPP documentation, to be included within Exhibit 23 (Water Resources and Aquatic Ecology) of the Certificate Application.								
103	Edick, R (NYSDEC)	103.5	NYSDEC indicates that an Environmental Restoration Plan should be prepared that describes re-grading and stabilization of temporary impacts to wetlands and streams, restoration of disturbed habitat, including re-planting suitable species in wetlands, adjacent areas and streams, wetland mitigation project construction, stabilization of disturbed areas subject to the SPDES Stormwater General Permit, removal and proper disposal of temporary road materials, and regrading soil in agricultural and forested areas in accordance with NYSDAM or other BMPs. Special attention should be given to the control of invasive species during project construction and restoration activities to minimize the spread of invasive species in the project development area.	A site restoration plan will be developed and provided within Exhibit 29: Site Restoration and Decommissioning of the Certificate Application.								
111	Jarvis, C.	111.3	In regards to PSS Section 2.1.1, commenter asks how many parcels that are suitable for this Project are in the Study Area and what the criteria for being suitable is, and asks how many single-family residences are in the current study area.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As stated in the PSS, Lighthouse Wind currently has no land holdings and, therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components, whether temporary or permanent. Lighthouse Wind continues to work through its required studies and stakeholder outreach, and to utilize the information gleaned to refine the Project layout, based on constraints at this location. Lighthouse Wind has provided with this comment response document, a figure presenting a potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this response document. Lighthouse Wind has also provided a figure demonstrating the setback distances in which the Project must comply as Appendix D to this response document. Location of other Project components is currently unknown but, additional information will be available by the time of Application.								

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
111	Jarvis, C.	111.4	In regards to PSS Section 2.1.1, Commenter notes that the documented land use is largely residential with the community supporting its farming activities due to its agricultural heritage.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind respectfully disagrees with this comment. Based on initial review of the land use, the predominant land use is agricultural consisting of active row crops, hayfields and pasturelands. Lighthouse Wind agrees that the Study Area also includes a wide range of other land uses, including rural residential, lakefront/lakeshore residential and seasonal recreational, and interspersed industrial and commercial development.
111	Jarvis, C.	111.5	In regards to PSS Section 2.1.1, commenter asks if the serenity of Golden Hill Park will remain for the people who camp there in their tents.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Potential visual and noise impacts to Golden Hill Park will be included in the assessments for Exhibits 19 (Noise and Vibration) and 24 (Visual Impacts).
111	Jarvis, C.	111.6	In regards to PSS Section 2.1.1, commenter notes that the Town of Somerset is largely a rural area because of its large farms which supports small percentage of the community. Commenter notes that most of the residents enjoy the openness of rural life.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. The predominant land use of the area is agricultural. Wind Energy development has been found by many independent fact-finders, including the Department of Agriculture and the Union of Concerned Scientists ( <a href="http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI">http://www.ucsusa.org/clean_energy/smart-energy-solutions/increase-renewables/farming-the-wind-wind-power.html#.VriuV1L3TVI</a> ) to be an attractive and highly compatible option for farmers, since wind projects can exist alongside continued cultivation of fields on the same piece of land. The research and literature available on these benefits to agricultural landowners and communities will be discussed and substantiated with citations to existing literature in Exhibit 4 of the Certificate Application.
111	Jarvis, C.	111.7	In regards to PSS Section 2.1.1.1, Commenter asks how 600-foot tall highly visible wind mills retain the rural lake plain character of the Town of Yates or the Town of Somerset, in accordance with the Comprehensive Plans	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As will be discussed and analyzed in more detail in the Certificate Application, the planning documents cited by the Commenter and others, have recognized the large availability of open land and wind resource as one of the most important assets in the area. Both the Town of Yates and Somerset have specific zoning regulations providing for wind projects as a permitted use and minimize the potential impacts associated with wind projects through the implementation of the standards set forth in the zoning laws. The Town of Somerset Comprehensive Plan 2012 Update and the Western Orleans Comprehensive Plan 2003 will be used as resources during the development of a Project layout and an assessment of compliance with these plans will be included in the Certificate Application.
111	Jarvis, C.	111.8	In regards to PSS Section 2.1.2.1, Commenter believes that heavy vehicular traffic will result in compaction of farm fields and damage to rural roads. Commenter also asks about quarries and borrow pits, and if the construction materials such as concrete and stone will be mined within the Study Area.	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Potential measures for avoiding, minimizing, or mitigating adverse agricultural impacts are presented in PSS Sections 2.1.4 and 2.1.5 and follow the NYSDA&amp;M Guidelines for Agricultural Mitigation for Wind Power Projects. Lighthouse Wind will also make commitments ensuring the proper restoration of agricultural land to private landowners who will host Project Components as part of their leases. This includes the remediation of disturbed soils, construction techniques and methods, and avoidance or mitigation of impacts to agricultural lands. Specific agricultural restoration practices will be developed in coordination with the NYSDA&amp;M and will be presented in Exhibit 4 (Land Use) of the Certificate Application.</p> <p>Potential road use impacts are discussed in PSS Section 2.10 and specific impacts, avoidance and minimization, and mitigation measures will be included in Exhibit 25 (Effect on Transportation) of the Certificate Application.</p>
111	Jarvis, C.	111.9	In regards to PSS Section 2.1.5, Commenter states that the 2009 NYSERDA Wind Energy Toolkit does not include Niagara or Orleans counties as potential development wind resources.	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. The 2009 NYSERDA Wind Energy Toolkit was created as a tool to help communities prepare for wind energy development, and is not a policy, regulatory manual, or a set of guidelines. Please note the document includes the following disclaimer "The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement." The fact that Niagara and Orleans Counties were not included in a list of potential development wind resources does not exclude the counties from having this potential.</p> <p>Additionally, as described in PSS Section 2.15, Lighthouse Wind used siting tools to determine, based on a number of factors, that the Study Area is an economically viable wind energy project location.</p>
DMM9	Staples, T.	DMM9.1	Commenter indicates that section 2.1 Land Use of the PSS fails to address microclimatic effects which would be caused by the proposed installation of many wind turbines. Deciduous fruit farming and vegetable farming in this unique geographic area are dependent on the temperature moderating effects of both prevailing winds and lake breezes. Commenter indicates the actual placement as well as the height of the turbines will certainly have a negative effect to the moderating effects of this climatic phenomenon.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary, any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.

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DMM12	Geraci-Spies, L.	DMM12.1	Commenter asks why Lighthouse Wind would allow good fertile land to be ruined, or at the very least, reduced when areas like California are suffering through a drought that is severely affecting agriculture production. Commenter states that they don't understand how the Project could get approval since there are so many unknowns.	An evaluation of agricultural impacts will be provided in Exhibit 4 (Land Use) of the Certificate Application. Soil impacts will be evaluated in Exhibit 21 (Geology, Seismology, and Soils). This project has not been granted a permit. Any continuation of project activity will be to further outline studies, stipulate with parties, and perform studies to be presented in the Certificate Application which will allow for evaluation of the Project.
DMM20	Hellert, C.	DMM20.1	Commenter indicates that Golden Hill State Park has been set aside as a place of restful tranquility for campers to escape the sounds of industry and the thought of industrializing the State Park, by erecting a giant wind factory within 1/4 to 1/2 mile is unconscionable. The wind industry itself tells us that the sound of operating wind turbines is an annoyance, while denying the facts of deleterious health effects. Commenter feels that placing an industrial wind factory within such close proximity to Golden Hill State Park and the shoreline of Lake Ontario is irresponsible.	Potential impacts to Golden Hill State Park will be evaluated in Exhibit 4 (Land Use), Exhibit 19 (Noise and Vibration), and Exhibit 24 (Visual Impacts) of the Certificate Application.
DMM32	Bronson, C.	DMM32.1	Commenter feels that the construction of the purported 600 ft. industrial wind turbines across the road from Golden Hill State Park, with many recreational features and a popular destination, will lead to the degradation of the state park, and blames Gov. Cuomo's agenda for pushing the Project through in Somerset.	Potential impacts to Golden Hill State Park will be evaluated in Exhibit 4 (Land Use), Exhibit 19 (Noise and Vibration), and Exhibit 24 (Visual Impacts) of the Certificate Application.
DDM37	Atwater, A.	DMM37.4	Commenter states that the Project will be detrimental to Niagara County's agricultural environment, citing that Lighthouse Wind has only provided for 3 feet remediation of the ground for agricultural recovery in the future, but temporary construction will damage land production, as remediated dirt is not the same as "good soil".	Potential measures for avoiding, minimizing, or mitigating adverse agricultural impacts are presented in PSS Sections 2.1.4 and 2.1.5 and follow the NYSDA&M Guidelines for Agricultural Mitigation for Wind Power Projects. Specific agricultural restoration practices will be developed in coordination with the NYSDA&M and will be presented in Exhibit 4 (Land Use) of the Certificate Application.
DMM39	Phillips, J.	DMM39.1	Commenter finds it disturbing that valuable farmland and local farms will lose lands to industrialization. Commenter indicates Lighthouse is attempting to minimize the effect this Project will have on loss of farmland. Cites Lighthouse Wind saying that crops will be able to be grown right up to the base of the turbines but it takes years for crops to grow. Commenter claims crops need rich topsoil to yield well. Goes on to say that If this Project is approved, Lighthouse will destroy acres of farmland by digging foundations. Commenter claims Lighthouse Wind will be using excavating equipment which also disturbs the surrounding acres of farmland. Commenter believes that upon backfilling that rich topsoil would no longer exist as topsoil and will be replaced with rock, sand and other non-nutritional earthly material that is currently in the ground in this area that was once part of the floor of Lake Ontario.	Potential measures for avoiding, minimizing, or mitigating adverse agricultural impacts are presented in PSS Sections 2.1.4 and 2.1.5 and follow the NYSDA&M Guidelines for Agricultural Mitigation for Wind Power Projects, and in keeping with commitments Lighthouse Wind has made to private landowners who will hose Project Components as part of their leases. This includes the remediation of disturbed soils, construction techniques and methods, and avoidance or mitigation of impacts to agricultural lands. In many cases, any soils excavated from an agricultural field would be appropriately staged and preserved such that those soils could be returned to areas of construction disturbance once components are installed. Specific agricultural restoration practices will be developed in coordination with the NYSDA&M and will be presented in Exhibit 4 (Land Use) of the Certificate Application.
DMM39	Phillips, J.	DMM39.2	Commenter claims that Lighthouse Wind has purchased approximately 15 acres of land that has been used by a local farm for years to grow corn for their dairy cows. Indicates that this information was not publicly made known to the residents involved; rather, this information leaked out. It has been said that Lighthouse Wind plans to use this as a site to make their concrete for this Project and/or to park their equipment. Commenter also says this purchased property adjoins residential property and the people who live in these homes will have this industrialized area in their back yards.	Lighthouse Wind plans to lease land in the Project area but, in certain cases, Lighthouse Wind may need to purchase certain parcels. There are no attempts to make this information confidential and upon closing, any finalized land purchase will be made public as required. The Certificate Application will include a final layout including lay down yards, operations and maintenance facilities, and the location of any batch plant that may be required.
DMM40	Kent, G.F.	DMM40.1	Commenter states that electricity generated by wind is advantageous but destroying prime farmland, valuable residential space, and ideal wildlife habitat in order to lessen reliance on fossil fuels sacrifices things of equal, or greater, value to achieve an otherwise worthwhile goal.	Potential measures for avoiding, minimizing, or mitigating adverse agricultural impacts are presented in PSS Sections 2.1.4 and 2.1.5 and follow the NYSDA&M Guidelines for Agricultural Mitigation for Wind Power Projects. Specific agricultural restoration practices will be developed in coordination with the NYSDA&M and will be presented in Exhibit 4 (Land Use) of the Certificate Application.
DMM40	Kent, G.F.	DMM40.2	Commenter indicates that with normal setbacks for industrial turbines, erecting turbines and building service roads in much of Orleans County would come at the expense of considerable woodland habitat. Commenter also mentions that lakeshore woodlots are particularly important as migrating species often stop to recharge before making the Lake crossing	Specific routing decisions and turbine placement will take into account these concerns using data from the studies outlined in the PSS. The results of these studies and anticipated impacts (e.g., calculations of temporary and permanent impact acreage to different land uses and vegetative communities) of the Project will be included in the Certificate Application.
DMM59	Bronson, C.	DMM59.1	Commenter notes that after reading Mr. Staple's letter that they learned that microclimates affect fruit growing and orchards, noting that spinning wind turbines would artificially prolong exposure to freezing temperatures and heat. Commenter states that PSC employees would not know as much as a local farmer and Home Rule should apply.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.
DMM63	Hellert, C.	DMM63.1	Commenter states micro-climatic effects of WECS are not covered in the PSS and should be addressed including potential negative micro-climatic effects of large wind energy conversion systems to production of deciduous fruits and other sensitive crops which are grown near lake Ontario. Studies must be done to determine temperature effects caused by improper placement of IWTs during specific growing stages in the life cycle such as apples where sensitivity begins from bud swell through green tip and continues through bloom and post bloom. Studies should also look at negative effects caused by IWTs on critical high temps during the growing season.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM71	Staples, T.	DMM71.1	Commenter is concerned about Potential negative micro-climatic effects of large wind energy conversion systems on production of deciduous fruits and other sensitive crops which are grown near Lake Ontario.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.
DMM71	Staples, T.	DMM71.2	Commenter indicates large scale wind energy conversion system would exacerbate the negative effects of low temperature events by lowering the low temperature and increasing the duration of the event. This negative effect would be caused by 1) enhancing the diminishing of wind speed at the onset of the event (critical low temperatures achieved earlier in time) allowing for more radiation cooling and thus lower temperature and 2) increasing the duration of the event by diminishing the displacement of the cold air by wind after sunrise. Commenter states that freeze and frost related damage to apples result in income losses for apples of as much as \$25,000 per acre. Similar negative effects are likely at harvest time for apples especially in late September through October and early November. Freeze damage will occur to fruit if subjected to prolonged sub 32 °F. Commenter believes significant losses to income will happen because the fruit will not be suitable for fresh consumption and or will have significantly shortened storage or shelf life.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.
DMM71	Staples, T.	DMM71.3	Commenter indicates wind farm could also affect critical high temperatures during the growing season causing a diminished mixing of air during daytime when the crop depends on cooling winds that come on shore from Lake Ontario as well as southwesterlies from Lake Erie. Increased temperatures within the orchard would result in diminished respiration capacity which allow for greater stress to the plant which in turn leads to sunburn of the fruit and as well as other stress related effects. Very slight increases in orchard temperatures also increase disease pressure such as apple scab and fireblight, both of which are economically devastating. Commenter concludes that a large scale wind energy conversion system should not be located within 5 miles of deciduous fruit acreage and furthermore not within 5 miles of south shore of Lake Ontario where there are soils suitable for future fruit production. Studies of large scale WECS and their effect on freeze/frost events and other microclimate phenomena are needed.	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.
DMM76	Staples, T.	DMM76.1	Commenter writes, "Microclimate effects to deciduous fruit production"	As stated in Section 2.1 of the PSS, Lighthouse Wind recognizes the importance of agriculture to the local region. As indicated in Section 2.1.4 of the PSS, Lighthouse Wind will consult with the NYSDA&M in developing the proper BMP's and mitigation measures to avoid and minimize where necessary any potential impacts to agricultural land. In addition, Lighthouse Wind will specifically consult with the local cooperative extension office on potential impacts, if any, from the operation of the Project to orchards. Lighthouse Wind will integrate reasonable suggestions in siting Project components and summarize these efforts in Exhibit 4 (Land Use) of the Certificate Application.
DMM79	Jarvis, C.	DMM79.2	Commenter indicates that after more than three months Lighthouse Wind should be able to indicate where machines will not be located.	Lighthouse Wind has not selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting potential buildable locations for wind turbines based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site as Appendix C to this comment response document.
DMM93	Hellert, C.	DMM93.2	Commenter believes that Lighthouse Wind will negatively impact the local heritage. Commenter notes that the historic Thirty Mile Point Lighthouse sits in the center of the area. Commenter states that Lighthouse Wind doesn't show turbines in project sponsored literature.	Lighthouse Wind will consider all significant resources of statewide and local importance for the preparation of the VIA and Certificate Application. Appendix I to this response document is an updated list of significant resources which will be updated upon further consultation with SHPO and local representatives.
<b>Electric System Effects (PSS Section 2.2/Application Exhibit 5)</b>				
17	Sokolow, A.	17.9	Commenter requests for an explanation of the impact Lighthouse Wind will have upon rates of energy (costs) in area, destination of the energy, as well as the reliability and safety of the energy. Will ratepayers have to pay for energy that is and isn't delivered? (aka Bonneville effect)	Lighthouse Wind does not manage the energy market. The electricity is purchased by utilities or other entities to distribute to their customers. An explanation of how the markets work can be found here: <a href="http://www.nyiso.com/public/about_nyiso/understanding_the_markets/energy_market/index.jsp">http://www.nyiso.com/public/about_nyiso/understanding_the_markets/energy_market/index.jsp</a> .  Lighthouse Wind will provide information in Exhibit 8 of the Certificate Application that details the Electric System Production Modeling.
49	Wolanyk, E.	49.19	Commenter asks how are the transmission lines to be connected to the grid if the leases do not provide a continuous path to the high tension power lines. This is not addressed anywhere in the PSS.	Lighthouse Wind will obtain contiguous land in order to reach an interconnection point. The Application will include a layout showing the collection lines and any transmission facilities.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.25	Commenter indicates that Section 2.2 of the PSS is deficient because it fails to account for fluctuations in the Project's power output and resulting effects on the New York State Transmission System with any level of specificity. Commenter asks what might lead to a forecasted reduction in transfer capability. What are reliability requirements? Is the Project able to meet them? If not, what are the kinds of measures that could be used to mitigate reliability issues? Does mitigating measures include the required availability of back-up power supplied by combustion of fossil fuels? If so, will the Project require carbon-emitting generation stations to remain open where otherwise they may be able to close permanently? Does Lighthouse Wind have any sense of the reliability of wind turbines given prevailing meteorological conditions in the area? Is any study proposed to gather weather data and determine the resulting impacts on the reliability of the Projects electrical generating capacity? Commenter indicates that all of these issues must be addressed by the Siting Board if electric system effects are to be fully quantified. Commenter believes the PSS is deficient as written and must be stricken and/or resubmitted including a section addressing the above issues. At a minimum, the Project scope should be modified to include the issues raised above.	Studies related to power fluctuations, transfer capability, or reliability are outside of the Article 10 requirements for a PSS. Exhibit 5, Electric System Effects, of the Certificate Application will include a system reliability impact study (SRIS) performed in accordance with NYISO tariffs. Exhibit 5 will also address potential significant impacts to transmission system reliability at a level of detail that reflects the magnitude of impacts and describe transfer capacity. Mitigation measures, if required, will also be described. Exhibit 10, Consistency with Energy Planning Objectives, of the Certificate Application will also describe the impact of the Project on reliability and fuel diversity in the state, as well as state energy policy and planning objectives.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.5	Commenter indicates the application should identify direct and indirect effects of the Project on ratepayers. First, direct payments by ratepayers without which the Project would not be viable should be identified, including mandatory ratepayer surcharges and other subsidies an incentives paid by ratepayers.	Exhibit 14 of the Certificate Application will discuss the cost of the Project. Exhibit 10 of the Certificate Application will include an investigation and discussion of the proposed Project's consistency with State Energy Planning Objectives, while Exhibits 5 and 8 will include detailed analysis of the Electric System Impacts and implications of the proposed Project within the broader context of the State's energy system. It is further anticipated that the Project will seek Renewable Portfolio Standard incentives or other New York State applicable incentives intended to encourage large scale renewable development projects such as the Lighthouse Wind project. A discussion of these programs will be provided in the Application, in addition to how these programs will help New York State achieve the goal provided in the State Energy Plan of 50% of the State's electricity needs met from renewables by 2030.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A3.1	T2 & Associates (Tom Tanton) attachment: In reference to the NYISO Interconnection Feasibility Study discussed on page 15 of the PSS, the Commenter suggests that the analysis include an evaluation of the impacts to the grid including other generators and not limited to transmission. Commenter also notes that this evaluation is important to reliability and balancing requirements, and costs offloaded to other generators and transmission users, not just the ability of the Project to connect.	The NYSIO interconnection process includes a Feasibility Study, a System Reliability Impact Study, and a Facility Study that includes impacts to other generators as well as the transmission system. The final result includes costs to Lighthouse Wind to provide System upgrades.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A3.2	T2 & Associates (Tom Tanton) attachment: Commenter requests that the Application address the cost and benefits of components identified by the DPS in their draft White Paper describing appropriate benefit to cost analysis under the REV, and include impacts on customer rates and bills.	The Commenter raises questions about "deployment of more expensive power generation technologies" and the potential impacts on rates. The cost-benefit analysis suggested by the Commenter goes beyond the scope of this proceeding and addresses issues currently being considered in other Commission proceedings, such as the Reforming Energy Vision proceeding. The types of policy issues raised by the Commenter are better addressed in the broader context of the REV proceeding and will not be addressed in the Application. However, specific information relating to the costs and benefits of the Project will be provided in the Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A3.3	T2 & Associates (Tom Tanton) attachment: Commenter requests analysis of following missing Article 10 measures: 1. Actual and expected net system impacts with respect to fuel consumption and greenhouse gas emissions, considering the non-proportional impact of additional wind generation (additional to existing) and cost allocation. 2. Time differentiated impacts during operation, including seasonal displacement of hydroelectric and of fossil fired units 3. Reliability impacts grid wide and of individual legacy plants (e.g. imposed increased ramping in response to additional volatility imposed on grid increases wear and tear on balancing plants.) 4. Cost effectiveness of project as a GHG reduction measure compared to other alternatives, including other renewable types and energy efficiency measures. Commenter claims that in many grids nationwide, wind is the most, not least, expensive manner in which to reduce greenhouse gasses from electric generation.	In the NYISO market, The matching of the loads to resources is done via the NYISO scheduling and unit commitment. The IPP creates its energy offer/price curve and submits it to NYISO. NYISO schedules units based on lowest costs. If the generator is selected in the Day Ahead market based on price, it will be scheduled to run. Renewable generators are not participating in the balancing market. There is no associated heat rate with a renewable generator as there is no fuel cost. NYISO has an organized market into which all generators participate. Because selection of unit commitment is based on price/offer curve, it is not possible to determine that any specific unit or fuel type will be displaced.  Some of the information requested will be available in the Certificate Application for the Project. Exhibit 6 of the Certificate Application will include a meteorological analysis supporting the estimated capacity factor for the Project. Exhibit 5 will include a system reliability survey. Exhibit 9 will include a more detailed evaluation of Project alternatives. Other information may not be required under the Article 10 process at the level of detail requested here.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
110	Isselhard, A.	110.5	Commenter states that NYISO reports state that power plants should be built downstate where electricity is needed as western NY is congested and has poor generation and little is arriving downstate. Commenter cites NYISO's Growing Wind (2010), Power Trends 2014, and Power Trends 2015 which commenter quotes as stating that upstate production is bottled by local transmission limitations and southeastern region consumes two-thirds of the electricity of the state but generates less than half of the state's power. Commenter also notes that several nuclear plants may be shut down, and states that if downstate doesn't need this power, than Lighthouse Wind project much not be needed either.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Power is used throughout the State of New York and is managed by the New York State Independent System Operator (NYISO). Exhibit 10 of the Application will include an investigation and discussion of the proposed Project's consistency with State Energy Planning Objectives, while Exhibits 5 and 8 will include detailed analysis of the electric system impacts and implications of the proposed project within the broader context of the State's energy system, including transmission capabilities and limitations. While generally energy planning seeks to locate generation near load, with some renewable energy resources, such as wind projects, potential project locations are limited by the location of sufficient wind resource, in this case New York has significant wind resources in upstate and northern New York. Other proceedings are ongoing at the Public Service Commission to address, as a collective public policy benefit, transmission siting and other efforts to address congestion and constraints to delivering to load. These proceedings and the issues addressed are beyond the scope of this application.
110	Isselhard, A.	110.6	Commenter asks how much of the 201 MW of power being generated will be sent to downstate if transmission losses are factored in. Commenter states based on historical data collected from current NYS wind factories, the Lighthouse Wind Project will only operate 25% of the time, and the life of the Project is only 15 years or less. Therefore, commenter asks how the Project will be beneficial. Commenter shares belief that placing wind generation facilities downstate would help or eliminate transmission congestion and be located where they are most needed.	Studies related to power fluctuations, transfer capability, or reliability are outside of the Article 10 requirements for a PSS. Exhibit 5, Electric System Effects, of the Certificate Application will include a system reliability impact study (SRIS) performed in accordance with NYISO tariffs. Exhibit 5 will also address potential significant impacts to transmission system reliability at a level of detail that reflects the magnitude of impacts and describe transfer capacity. Mitigation measures, if required, will also be described. Exhibit 10, Consistency with Energy Planning Objectives, of the Certificate Application will also describe the impact of the Project on reliability and fuel diversity in the state, as well as state energy policy and planning objectives.
110	Isselhard, A.	110.7	Commenter states that both the Towns of Somerset and Yates, NY are very close to the Niagara Power Plant which is dependable. Commenter also states that the Kintigh Generating Station in operation since 1984 which causes air pollution, visual pollution, has been bankrupt and failed to meet PILOT agreements.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in the Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
111	Jarvis, C.	111.10	In regards to PSS Section 2.2, commenter notes that the International Electromechanical Commission (IEC) and the National Renewable Energy Laboratory (NREL) should be included on the list of organizations.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. This list of potential standards, codes, and guidelines presented in PSS Section 2.2 was not an inclusive list. As such, Lighthouse Wind will consider if standards, codes, and guidelines presented by the IEC and NREL are applicable to the Project and will incorporate these into the design of the facility as appropriate.
DMM26	Corwin, K.	DMM26.2	Commenter states that the power generated in this area of New York State is sent downstate and there is congestion near Albany that impedes the transference of this energy. Commenter questions why more power is needed. Commenter also notes that the citizens of New York State are paying for these turbines with their own taxpayer and ratepayer dollars, which is subsidizing the building of these wind factories at 80% of the total cost of these projects. Commenter surmises that "subsidy" causes New York State electricity rates to be amongst the highest in the nation.	<p>Much of this information was stated in the PSS, Section 1.5, Project Purpose, Need and Benefit, and updated information on this will be supplied in the Certificate Application. In September of 2004, the New York State Public Service Commission issued an Order adopting an RPS, with a goal of increasing the proportion of renewable energy used by New York consumers from the then-current 19.3 percent to at least 25 percent by the end of 2013. In January 2010 the RPS goal was increased, and the goal for the proportion of renewable energy used by New York consumers for renewable resources was revised from 25% to 30% and the term for attaining the program goal was extended to 2015. The RPS has been extended to include another solicitation in 2016, but is expected to be replaced by the Clean Energy Standard as part of the Reforming the Energy Vision (REV) proceeding. The details of this proceeding and any resulting programs or legislation are pending. The State Energy Plan goal put forth last year was to achieve 50% renewables by 2030. It is anticipated that Lighthouse Wind will either participate in one of the last solicitations in the current RPS or in the final program of the CES. If Lighthouse Wind participates in the final offering of the RPS, it would competitively bid in to the solicitation for Renewable Energy Credits (RECs). REV is a broad reformation of the current energy infrastructure in New York State. It does not necessarily rely only on the creation of microgrids. Pending finalization of the goals, programs, and statutes, Lighthouse Wind plans to comply with REV by contributing to the REV target of 50% of all New York's energy being generated from renewable sources. The Project does not currently plan to obtain funding via the Green Bank, but due to uncertainty in how policy will be formed for future programs, this cannot be ruled out.</p> <p>If RPS and REV policies are completed at time of application, Lighthouse Wind will include additional information in the Application as to how it may participate in New York State programs.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DDM37	Atwater, A.	DMM37.2	Commenter notes area already has a power plant, which provides jobs for local residents. Commenter believes that the Town's largest land owner, the power plant, will still be needed as a source of backup power when these turbines are operational.	Project purpose and need, as described in the PSS Section 1.5, will be reiterated in the Certificate Application Exhibit 2. Lighthouse Wind believes that of all of America's energy options, wind power is the safest for our environment, reducing carbon emissions and ensuring the country's energy stability. While much attention has been focused on the potential for its intermittency, a January 2014 study by DOE's NREL, the University of Colorado and EPRI emphasizes that wind energy "can act in an equal or superior manner to conventional generation when providing active power control, supporting the system frequency response, and improving reliability." (Active Power Controls from Wind Power: Bridging the Gaps by E. Ela, V. Gevorgian, P. Fleming, Y.C. Zhang, M. Singh, E. Muljadi, and A. Scholbrook National Renewable Energy Laboratory; J. Aho, A. Buckspan, and L. Pao University of Colorado; and V. Singhvi, A. Tuohy, P. Pourbeik, D. Brooks, and N. Bhatt Electric Power Research Institute ( <a href="http://www.nrel.gov/docs/fy14osti/60574.pdf">http://www.nrel.gov/docs/fy14osti/60574.pdf</a> .)
<b>Public Health and Safety (PSS Section 2.3/Application Exhibit 15)</b>				
2	Hellert, C.	2.1	Commenter requests explanation of the emissions that will result from construction and how public health will improve throughout the construction phase of the Project.	The purpose of the PSS is to establish the methodology, scope of studies, or program of studies to be conducted in support of an application being submitted for the Project pursuant to the Article 10 regulations. In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to providing details on construction and health effects in the final application under Article 10. Lighthouse Wind notes that construction activities will be similar to any other infrastructure project.
2	Hellert, C.	2.2	Commenter asks what will be the source of backup power if the coal plant in Somerset is decommissioned.	This Project is not predicated on any existing power facility being modified or decommissioned, therefore, the comment is beyond the scope of the Article 10 regulations in relation to this Project.
2	Hellert, C.	2.3	Commenter asks what studies have been done to date on the toxic emission levels from energy production currently in place in the Town of Yates. Commenter requests that Lighthouse Wind conduct studies that include levels of airborne mercury currently contaminating public water supplies from Lake Ontario, and the levels of sulfur dioxide and nitrogen oxide in tests completed in the Town of Yates.	The studies and data that this commenter requests are unreasonable and beyond the scope of the Article 10 regulations in relation to this Project.
2	Hellert, C.	2.4	Commenter requests Lighthouse Wind conduct baseline health studies in the Town of Yates showing the number of residents that are suffering from severe lung damage, asthma and emphysema as a result of the toxic emissions resulting from the coal plant.	Lighthouse Wind has not conducted baseline health studies on the existing health conditions of the Town of Yates residents since this request is unreasonable and goes beyond the scope of Article 10 regulations. Lighthouse Wind notes that wind turbines, unlike fossil fuel plants, do not emit toxic chemicals into the atmosphere.
3	Hellert, C.	3.1	Commenter inquires as to what informational meetings have been conducted and what training has taken place with the Lyndonville Fire Department? Documentation of training completed and the schedule followed should be included, as well as a schedule of future training.	<p>Comment noted. As discussed in Section 2.3 of the PSS, a Fire Protection and Response Plan will be developed for the Project and presented as a draft in Exhibit 15 of the Application which will include training and coordination with local fire departments.</p> <p>A brief summary of contact with emergency services follows:  Lyndonville Fire Department:  -Identified as stakeholder in PIP. Sent letter upon filing of PIP.  -Phone call in 2014 after filing PIP, left message.  -At least 2 phone calls in 2015 with messages left.  -January 19, 2016 left message  -January 22, 2016 spoke with representative, was told based on current plan they don't see need to meet. They will reconsider after we have filed and presented a site plan (in application).</p> <p>Barker Fire Department  -Identified as stakeholder in PIP. Sent letter upon filing of PIP.  -Phone call in 2014 after filing PIP, left message.  -At least 2 phone calls in 2015 with messages left.  -January 19, 2016 left message</p> <p>Other Fire Departments  -Olcott Fire Co. and Miller Hose Fire Co. were also included in the PIP stakeholder list.  -Phone calls/messages to each of these groups after filing in 2014.</p> <p>Mercy Flight  -January 19, 2016 call to Director of Flight Operations Marc Boies  -January 23, 2016 called about arranging meeting  -January 26, 2016 spoke with Marc Boies.  -January 27, 2016 met with representatives of Mercy Flight at their headquarters in Buffalo.</p>

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3	Hellert, C.	3.2	Commenter asks what emergency procedures will be followed in the event of a turbine fire. How will properties be protected should a fire occur at a turbine located near a home?	The Fire Protection and Response Plan, which will be presented as part of Exhibit 15 of the Certificate Application will provide information on the rescue response procedures.
3	Hellert, C.	3.3	Commenter would like Lighthouse Wind to provide a complete listing of the meetings held with emergency personnel at Medina Health Care System, Strong West and Eastern Niagara Hospital.	No meetings have been held with Medina Health Care System, Strong West and Eastern Niagara Hospital.
12	Smiley, A.	12.7	Commenter requests explanation of how preferred alternative promotes public health and welfare.	As discussed in Sections 2.3 and 2.15 of the PSS, an evaluation of the different alternatives considered and a discussion on public health and safety will be included as Exhibits 9 and 15 of the Certificate Application.
17	Sokolow, A.	17.3	Commenter notes that PSS does not include specifics on wells/water resources within Project Area and is missing a protocol for testing of wells before and after blasting.	Specifics regarding wells and water resources within the Project Area will be provided in the Certificate Application as Exhibit 23. If blasting is determined to be required, the Certificate Application will include a preliminary blasting plan, which will include protocols for testing wells (e.g. quality and quantity).
17	Sokolow, A.	17.4	Commenter inquires as to how Lighthouse Wind will test for NESC and NEPA 780? Commenter request s additional information on details for lightning strikes and public health & safety.	As discussed in Section 2.3.3.4 in the PSS, lightning protection systems are fairly well understood within the industry and utilize the National Electric Safety Code and National Fire Protection Association standards. The Certificate Application will include up-to-date information on lightning density for the region and the appropriate grounding systems to mitigate potential lightning strikes.
17	Sokolow, A.	17.6	Commenter requests that Lighthouse Wind provide municipality with funds to hire third party professional to review Project for concerns regarding public health and safety, noise, etc. If this is not going to happen then commenter asks who is responsible for ensuring public health and safety in regards to Project.	Lighthouse Wind believes that the Article 10 process is robust and will comprise a number of Board members with diverse backgrounds and will not alleviate Lighthouse Wind's responsibility to conduct extensive environmental studies, including ensuring the protection of public health and safety in regards to the Project.
19	Spliethoff, H. (NYSDOH)	19.1	Commenter indicates it would be helpful if the locations of all sites in DEC remediation programs were presented on a map of the area surrounding the Project study area.	As required under Article 10 regulations, a map depicting the Project in relation to contaminated sites will be included in the Certificate Application Exhibit 15.
19	Spliethoff, H. (NYSDOH)	19.2	PSS Page 30, Section 2.4.3, 5th bullet. Commenter states that it is unclear whether these representative property lines and receptors are inclusive of or in addition to the six ambient baseline locations discussed on page 31.	There will be many more modeled evaluation points than measured locations. One measured location may serve as a representative of multiple points under similar environments.
20	Grout, P. (President Genesee-Orleans Board of Health)	20.1	Commenter inquiries about the State's position and plan to ensure that residents' health is protected and the impact on local environment is reviewed and vetted through standard state assessments of projects of this magnitude. Local boards of health believe it is prudent to require a SEQRA environmental review as they lack resources and expertise in these manners.	Lighthouse Wind believes that the Article 10 process is robust and will comprise a number of Board members with diverse backgrounds and doesn't alleviate Lighthouse Wind's responsibility to conduct extensive environmental studies, including ensuring the protection of public health that will have to be reviewed and vetted by the Board. As explained in a letter form the PSC to the Genesee-Orleans Board of Health, "the classification of Article 10 projects as Type II actions under the State Environmental Quality Review Act (SEQRA) in no way precludes consideration of public health or environmental concerns. The Article 10 process in many ways parallels the standard SEQRA process for considering the appropriate Scope of Studies, opportunity for public review and comment, the consideration of alternatives, and the development of a full record on all relevant and material impacts to the natural and human environment."
21	Spitzer, D. (Attorney for Town of Yates)	21.5	Commenter requests Lighthouse Wind provide the Town with an evaluation of the types of emergencies that might arise during construction and operation of the Project. Commenter requests that the analysis indicate whether local first responders are capable and adequately equipped to respond to such emergencies, if required.	The types of emergencies that could occur are listed in the PSS Section 2.3, Public Health and Safety. Meetings will be held with local first responders to determine their ability to respond to certain types of emergencies and an emergency response plan will be created and added to the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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27	Maid, G.	27.2	<p>Regarding PSS Section 2.12.3, commenter notes that the PSS states that it is not anticipated that any additional equipment or training for first responders will be required and that emergency response plans will be developed and filed in the Certificate Application, after the comment period is over.</p> <p>Commenter states the region has limited equipment, personnel, training, and financial and mutual aid resources. The following areas are a high concern for the safety of the public and first responders during the construction and operation of a very large industrial facility:</p> <ol style="list-style-type: none"> <li>1. The region has limited trained personnel, especially during the day.</li> <li>2. The region has minimal Class A firefighting equipment and no aerial apparatus capable of accessing the proposed structures.</li> <li>3. The region has limited training in industrial accident / entrapment rescue.</li> <li>4. The region has limited equipment to deal with industrial accident / entrapment rescue</li> <li>5. The region has insufficient training in high angle rescue.</li> <li>6. The region has limited training and equipment to deal with hazardous materials.</li> <li>7. Calls for service will rise significantly during the construction phase, as with all industrial projects and will tax already under staffed organizations.</li> </ol> <p>Commenter states that before a project of this magnitude can begin, it must ensure it will not overrun the ability of emergency personnel to protect the community and those engaged in the construction or operation of such a facility. Commenter disagrees that there will be little impact, stating a facility of this scope and size will have a significant impact on the volunteer organizations that service the community, and their consult, consent, funding, and agreement prior to the Certificate Application of the upmost importance. It should not be glossed over hastily. The community needs to know now, not during the application phase.</p>	<p>Lighthouse Wind will prepare and submit a complete Certificate Application which includes scoped items covered under the Article 10 Regulations. Following the submittal of this document, commenters will be allowed an additional comment period to ask questions pertaining to the content of the Certificate Application. Meetings will be held with local first responders to determine their ability to respond to certain types of emergencies and an emergency response plan will be created and added to the Certificate Application.</p> <p>This information will be available in Exhibit 15 (Public Health and Safety) of the Certificate Application.</p>
27	Maid, G.	27.3	<p>Commenter claims additional public safety concerns were not addressed in the PSS, including what security measures are in place, either hardware, software, intelligence, etc. to prevent the disruption or takeover of the facility by cyber-attack?</p>	<p>A preliminary plan identifying electronic security measures will be provided within Exhibit 18 of the Certificate Application. As stated in the PSS, this exhibit is not specifically "scoped" in the PSS, as the content is prescribed per 16 NYCRR § 1001.1 through 1001.41 and content will be presented in its entirety within the Certificate Application.</p>
27	Maid, G.	27.4	<p>Commenter claims additional public safety concerns were not addressed in the PSS, including what security measures have been implemented to secure this facility from disruption of takeover by criminal or terrorist activity? Commenter states Article 10 – 1000.5 requires the PSS contain “a list and description of all local laws and regulations issued thereunder, applicable to the construction, operation, or maintenance of the proposed facility and a statement either providing a preliminary assessment of an ability to comply or indicating specific provisions that the Applicant will be requesting the Board to elect not to apply, in whole or in part, and a preliminary explanation as to why the Board should elect not to apply the specific provisions as unreasonably burdensome in view of the existing technology or the need of or cost to ratepayers whether located inside or outside of such municipality.”</p>	<p>A preliminary plan identifying electronic security measures will be provided within Exhibit 18 of the Certificate Application. As stated in the PSS, this exhibit is not specifically "scoped" in the PSS, as the content is prescribed per 16 NYCRR § 1001.1 through 1001.41 and content will be presented in its entirety within the Certificate Application. Local laws and regulations are discussed within Section 5 of the PSS and as stated Lighthouse Wind will continue to consult with municipalities and other local agencies to determine whether all of the pertinent requirements have been identified.</p>
27	Maid, G.	27.5	<p>Commenter claims additional public safety concerns were not addressed in the PSS, including that selected security sections, i.e. fencing (along with many others), in Local Law #1 contained an entry that Lighthouse Wind will request that the Siting Board render a determination that these measures be deemed unduly burdensome, however an explanation has not been provided as required.</p>	<p>Lighthouse Wind will work with property owners to determine the final layout including any fencing. Due to the fact that specific engineering and layout have not been done for each wind turbine, there may be overriding environmental or operational reasons for which we would need request relief from this portion of the law. The Certificate Application will include a full summary of all applicable local laws to the Project with a determination of whether the Project will comply or provide an explanation for why a waiver is being sought. Section 5 of the PSS includes a preliminary list of substantive requirements of the Town of Yates and Somerset.</p>
27	Maid, G.	27.6	<p>Commenter claims additional public safety concerns were not addressed in the PSS, including ensuring the safe operation of a large facility should not be considered unduly burdensome.</p>	<p>Lighthouse Wind agrees with the comment. The comment regarding safe operation of a large facility not being considered unduly burdensome seems to be referencing selected security sections of the local laws (including fencing) in which Lighthouse Wind was assessing potential compliance and whether or not compliance with a local law was anticipated. Certain laws address specific items such as fencing materials, locking mechanism, etc. and a determination as to these specific items will be made as some (not all) may be considered unduly burdensome. Lighthouse Wind takes safety and security very seriously and in many instances will take extra precautions beyond minimum requirements to ensure safe construction and operation.</p>
41	Punch, J. (on behalf of Town of Somerset)	41.2	<p>Commenter discusses effects of infrasound and low-frequency noise (ILFN) and requests that Lighthouse Wind acknowledges the potential health impacts of the dynamically modulated ILFN that would be emitted from industrial (upwind) wind turbines, and demonstrates how AHEs will be avoided in participating and non-participating residents living in close proximity to the turbines. Commenter suggests that the extensive body of scientific research and reports must be taken into account in addressing this issue.</p>	<p>Section 2.4 Noise and Vibration of the PSS describes the Noise Impact Assessment to be conducted. Lighthouse Wind acknowledges that there is an infrasound and low-frequency noise component to the wind turbine sound emission. Lighthouse Wind believes that there is a large body of literature that demonstrates that meeting audible noise guidelines will also ensure the protection of health across the sound spectrum. However, Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the final application under Article 10. This will include the type of information being requested.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
41	Punch, J. (on behalf of Town of Somerset)	41.3	Commenter requests that discussions of public-health and quality-of-life concerns include an extensive review of scientific literature on relationship between IWTs and AHEs, while focusing on studies by independent researchers, and not simply on talking points in reports, or white papers, written by panels of experts hand-picked by the wind industry and sponsored by governmental entities charged with meeting a mandate for supporting wind-energy projects.	Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the Certificate Application. This will include the type of information being requested.
41	Punch, J. (on behalf of Town of Somerset)	41.4	Commenter requests that Lighthouse Wind acknowledge resistance to masking inherent in ILFN and should include in its literature review studies on the topics of annoyance and auditory masking. The relevant acoustic standards and guidelines (i.e., ANSI, IEC, ISO) must be adhered to by Lighthouse Wind in any application filing.	Lighthouse Wind will follow applicable standards in the Application.
41	Punch, J. (on behalf of Town of Somerset)	41.5	Commenter notes that in its literature review, Lighthouse Wind must not discount anxiety and tinnitus as potential adverse effects experienced by individuals living near IWTs.	The purpose of the PSS is to establish the methodology, scope of studies, or program of studies to be conducted in support of an application being submitted for the Project pursuant to Article 10. In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the Certificate Application. However, research indicates that properly sited wind projects do not cause tinnitus and anxiety levels are within those found with other infrastructure projects that emit noise.
41	Punch, J. (on behalf of Town of Somerset)	41.6	Commenter notes that an indoor level of 45 dBA for even less than 5 minutes is sufficient to wake people or keep them from going to sleep, and a level reaching 50 dBA is likely to be a strong deterrent to sleep. Of all the reported health effects resulting from noise exposure, including wind turbine noise, commenter states sleep disturbance is the most well-documented. Lighthouse Wind must show with a reasonable degree of scientific certainty through use of computer modelling that the Project will minimize/avoid the negative impacts of sleep disturbance and related health effects, taking into account the impacts of dynamically modulated ILFN and the guidelines provided by the WHO and national and international standards organizations.	The purpose of the PSS is to establish the methodology, scope of studies, or program of studies to be conducted in support of an application being submitted for the Project pursuant to Article 10. In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the Certificate Application. However, the work recently published by Health Canada and specifically by Dr. David Michaud, "Michaud et al., 2016. Effects of Wind Turbine Noise on Self-Reported and Objective Measures of Sleep. Sleep, Vol. 39, No. 1" stated, "sleep disturbance reported as a result of transportation noise exposure occurs at sound pressure levels that exceed WTN [wind turbine noise] levels calculated in the current study. Study results concur with those of Bakker et al. (2002), with outdoor WTN levels up to 54 dB(A), wherein it was concluded that there was no association between the levels of WTN and sleep disturbance when noise annoyance was taken into account".
41	Punch, J. (on behalf of Town of Somerset)	41.7	Commenter notes that Lighthouse Wind should not discount as invalid the potential that the inner ear is capable of transmitting infrasound to brain centers that interpret those signals to be disruptive, thereby resulting in negative sensations and AHEs. It is apparent that those effects can result either from the fact that the averaged acoustic energy that evokes those perceptions is not perceived as audible sound or from the fact that the system is responding to energy peaks, which may or may not be perceived as audible sound.	Applicable, credible science on this topic will be reviewed and discussed in the Certificate Application.
41	Punch, J. (on behalf of Town of Somerset)	41.10	Commenter asks what constitutes a reasonable complaint. Potential remedial actions should be detailed for specific types of complaints. For example, what if a resident complains that the turbines are keeping one or more family members awake at night? What remedial action(s) can and will be taken to ensure that the family can sleep undisturbed by the noise? Lighthouse Wind must address this issue more specifically in any filing of an application.	Lighthouse Wind will have a comprehensive complaint resolution process in place. In the event residents' complain of turbines causing sleep disturbance, Lighthouse Wind will work with the concerned resident. However, based on the international scientific literature and Lighthouse Wind's commitment to a 45 dBA or less nighttime sound level at non-participating residences, such issues are not anticipated.
41	Punch, J. (on behalf of Town of Somerset)	41.11	Commenter quotes Lighthouse Wind in PSS: "A Complaint Resolution Procedure will be implemented as the Project becomes operational." Commenter notes that having such a procedure is a welcomed idea, but its major terms should ideally be stated in the pre-construction application, as opposed to the post-construction phase.	A Complaint Resolution Procedure will be presented in the Certificate Application for both construction and operation of the Project. Additional comment periods allotted within the Article 10 Application process will allow for additional review and finalization of the Complaint Resolution Procedure prior to implementation.
43	Orr, C.	43.1	Commenter notes that after personally experiencing negative impacts of Industrial Wind in Wyoming County, they are concerned that Lighthouse Wind is shirking their responsibility to conduct health studies before placing the Project among people's homes. Commenter expresses concern that due diligence is not being completed and common sense not being taken into consideration.	Lighthouse Wind is committed to having a comprehensive section on international research on wind turbines and health effects included in the Certificate Application. The research will include the type of information being requested.
43	Orr, C.	43.2	Commenter notes that in 2011, Dr. Ollson (now a consultant under employ of Project) wrote in an environmental health journal that "it would be imperative to ensure robust study design prior to study initiation, when then would include acoustical engineers, health scientists, epidemiologists, social scientists, and public health physicians..." During a Niagara County board of health meeting Lighthouse Wind brought Dr. Ollson along and he stated industrial wind facilities "pose no health threat" and that "If people are concerned (about their health) they should see their local physician..." Commenter would like an explanation as to this discrepancy in what was said by Dr. Ollson during meeting with what he has written previously.	This is only a partial quote from Dr. Ollson's 2001 peer-reviewed published article on "Health effects and wind turbines: A review of the literature." in the journal Environmental Health. This paper detailed the state of the science in 2011. At that time it was an emerging field of environmental health and Knopper and Ollson provided details on the type of additional studies and research that would further our understanding in 2011. This statement has been taken out of context and was not meant for individual studies for every new wind installation, rather a broader research program. There have been numerous studies conducted since 2011, with the most comprehensive study being that conducted by Health Canada and reported in 2014. Therefore, individual project baseline and specific studies are not required to ensure the protection of public health. In addition, Lighthouse Wind is committed to having a comprehensive section on the latest international research on wind turbines and health effects included in the Certificate Application.

Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
43	Orr, C.	43.7	<p>Commenter notes that Christopher Ollson displayed a collection of peer reviewed studies at December 31 2015 meeting with the Niagara County board of Health to make his point that "Noise, vibration and shadow flicker" from wind turbines pose no health threat, furthermore stating that Annoyance is not a health threat. The conclusion of the 2009 World Health Organization study on Night Noise Guidelines does not corroborate Dr. Ollson's statement. The study says: The review of available evidence leads to following conclusions:</p> <ul style="list-style-type: none"> <li>• Sleep is a biological necessity and disturbed sleep is associated with a number of adverse impacts on health.</li> <li>• There is sufficient evidence for biological effects of noise during sleep: increase in heart rate, arousals, and sleep stage changes not awakening.</li> <li>• There is sufficient evidence that night noise exposure causes self-reported sleep disturbance, increases in medicine use, increase in body movements, and (environmental) insomnia.</li> <li>• While noise induced sleep disturbance is viewed as a health problem in itself (environmental insomnia) it also leads to further consequences for health and well-being.</li> <li>• There is limited evidence that disturbed sleep causes fatigue, accidents, and reduced performance.</li> <li>• There is limited evidence that noise at night causes hormone level changes and clinical conditions such as cardiovascular illness, depression and other mental illness. It should be stressed that plausible biological model is available with sufficient evidence for the elements of the causal claim.</li> </ul> <p>Commenter notes that the Lighthouse Wind letter focuses only on the average night noise over a year totally leaving out the rest of the WHO study. It cannot be stated strongly enough that WHO's concerns about long-term effects such as cardiovascular disorders should be evaluated in light of the acoustic situation over a long time period such as annual average of night noise level, while instantaneous effects such as EFG -or awakening reactions are better evaluated in light of the maximum noise level per event, such as the passage of a lorry, airplane, or train. Commenter believes it is wrong for Lighthouse Wind to claim, according to evidence presented by the WHO that no night-time noise of industrial wind turbines will cause adverse health effects result from short term sleep disturbance caused by unusual short term noise significantly exceeding the ambient base-line level.</p>	<p>Dr. Ollson's presentation was supplemented by a letter to the Board of Health. The WHO Night Noise Guidance from 2009 is based on an average of 40 dBA over the course of a year. Lighthouse Wind note's that the Interim Guideline that the WHO believed to be achievable in the same document is 55 dBA. Regardless, Lighthouse Wind acknowledges that prolonged lack of sleep can result in adverse health impacts as described by the WHO. However, wind turbine specific studies support that properly sited wind turbines will not lead to adverse health impacts or lack of sleep.</p> <p>The purpose of the PSS is to establish the methodology, scope of studies, or program of studies to be conducted in support of an application being submitted for the Project pursuant to Article 10. In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the Certificate Application. However, Lighthouse Wind believes that the work recently published by Health Canada and specifically by Dr. David Michaud, "Michaud et al., 2016. Effects of Wind Turbine Noise on Self-Reported and Objective Measures of Sleep. Sleep, Vol. 39, No. 1" stated, "sleep disturbance reported as a result of transportation noise exposure occurs at sound pressure levels that exceed WTN [wind turbine noise] levels calculated in the current study. Study results concur with those of Bakker et al. (2002), with outdoor WTN levels up to 54 dB(A), wherein it was concluded that there was no association between the levels of WTN and sleep disturbance when noise annoyance was taken into account".</p>
43	Orr, C.	43.9	<p>Commenter notes that Christopher Ollson's letter on page 3, states: "Adverse health effects have not been attributed to properly sited wind turbine projects, and "annoyance is not a medical condition" and that neither of these generalizations can be proved to be fact. As a matter of fact, they are taken out of context from scientific research and are not the conclusions of the authors, Pedersen, Rudolpi and WHO studies.</p>	<p>Dr. Ollson's paper was a first step in Lighthouse Wind's attempt to respond to concerns by the Board of Health. In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to having a comprehensive section on international research on wind turbines and health effects included in the Certificate Application. However, Lighthouse Wind believes that the work recently published by Health Canada and specifically by Dr. David Michaud, "Michaud et al., 2016. Effects of Wind Turbine Noise on Self-Reported and Objective Measures of Sleep. Sleep, Vol. 39, No. 1" stated, "sleep disturbance reported as a result of transportation noise exposure occurs at sound pressure levels that exceed WTN [wind turbine noise] levels calculated in the current study. Study results concur with those of Bakker et al. (2002), with outdoor WTN levels up to 54 dB(A), wherein it was concluded that there was no association between the levels of WTN and sleep disturbance when noise annoyance was taken into account". Lighthouse Wind believes that this research supports the conclusions of Dr. Ollson's letter.</p>
43	Orr, C.	43.10	<p>Commenter requests that Lighthouse Wind prove, by independent, peer reviewed scientists and health experts, that wind turbines do not cause health impacts. Commenter states that Wind Corporation financed "so-called experts" are paid to draw conclusions to support the Projects. Commenter states that these people do not qualify as non-biased or independent and therefore their conclusions are not valid.</p>	<p>Lighthouse Wind is committed to having a comprehensive section on international research on wind turbines and health effects included in the Certificate Application. Lighthouse Wind notes that Dr. Ollson is considered an authority of potential health effects and wind turbines. He holds numerous academic positions and has been qualified on a number of occasions in tribunals, legal proceedings and hearings to provide independent, non-biased evidence.</p>
43	Orr, C.	43.11	<p>Commenter states that they moved from their home in Wyoming county (Orangeville, New York) after personally experiencing negative impacts from wind turbine sound, claiming the wind turbines were the reason for the move. Commenter states that some of the people of the Town of Orangeville filed a \$40 M lawsuit against Invenergy because of being forced to flee their homes or not being able to afford to leave, and therefore suffering ongoing ill effects of the Project while they watched their property values plummet.</p>	<p>Lighthouse Wind is committed to a comprehensive review of international research completed on wind turbines and public health as part of the Certificate Application. We note that the Health Canada 2014 comprehensive field based wind turbine study concluded "Overall, the following were not found to be associated with wind turbine noise (up to 46 dBA):</p> <ol style="list-style-type: none"> <li>a. self-reported illnesses (e.g., dizziness, tinnitus, prevalence of frequent migraines and headaches) and chronic health conditions (e.g., heart disease, high blood pressure and diabetes);</li> <li>b. indicators of stress (e.g., hair cortisol, blood pressure, heart rate, self-reported stress);</li> <li>c. sleep problems (self-reported and measured sleep quality);</li> <li>d. self-reported quality of life and satisfaction with health</li> </ol>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
46	Herstek, F.	46.7	Commenter notes that the PSS does not include the significant and disproportionate environmental impact on the health and well-being of residents of Towns of Somerset and Yates. The PSS (2.4.2.2 Operation) does not include the adverse impacts to well-being of: the noise from six hundred and twenty feet (620 feet) high wind turbines which is assessed as being 46% higher than the smaller wind turbines originally proposed by Lighthouse Wind or the long term impact of infrasound, over the 20-year life of the Project. Commenter notes that studies with respect to audiological health advise proximity of residences to wind turbines as a critical factor in calculating infrasound intensity and duration when destemming infrasound effect. The lack of definition of the impact study area submitted with the PSS renders these analyses impossible.	Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the final application under Article 10. We note that the Health Canada 2014 comprehensive field based wind turbine study concluded "Overall, the following were not found to be associated with wind turbine noise (up to 46 dBA): a. self-reported illnesses (e.g., dizziness, tinnitus, prevalence of frequent migraines and headaches) and chronic health conditions (e.g., heart disease, high blood pressure and diabetes); b. indicators of stress (e.g., hair cortisol, blood pressure, heart rate, self-reported stress); c. sleep problems (self-reported and measured sleep quality); d. self-reported quality of life and satisfaction with health  It is important to understand that from a health perspective it is not the height of the turbines, or the noise output at their hub, that is the important. Rather, it is the resulting sound level at people's homes that is critical to ensure the protection of public health. Lighthouse Wind is committed to a maximum sound level of 45 dBA nighttime at non-participating residences, regardless of the height of the turbines. Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the final application under Article 10. This will include the type of information being requested on infrasound.
49	Wolanyk, E.	49.24	On page 17 of the PSS, Lighthouse Wind writes, "In addition to the potential risks mentioned above, it is important to note that the Project would result in significant positive impacts to public health." Commenter states that this statement has yet to be determined and should not be taken as a given. Commenter believes that people who live near industrial wind turbines disagree and that science is just beginning to document that this is not the case. Commenter believes that unless Lighthouse Wind is going to design and fund a comprehensive research project to substantiate this statement it should be removed from the PSS. Commenter believes that the Kintigh Power Generating Plant is the cleanest coal burning plant east of the Mississippi River and that the statements made in the PSS do not represent this area accurately.	Lighthouse Wind anticipates that the Project will not only be environmentally compatible but, believes it is environmentally responsible; the Project represents an abundant source of clean energy and would help to stem greenhouse gas emissions and carbon emissions attributed with the burning of fossil fuels such as coal and natural gas. As has been stated in the EPA's Clean Power Plan, "With abundant clean energy solutions available, and building on the leadership of states and local governments, we can make continued progress in reducing power plant pollution to improve public health and the environment while supplying the reliable, affordable power needed for economic growth. By doing so, we will continue to drive American leadership in clean energy technologies" (Executive Office of the President, 2013).
49	Wolanyk, E.	49.25	Commenter asks how are either of the two small volunteer fire departments (Barker Fired Department and Lyndonville Fire Department) which are listed under existing emergency services in the PSS expected to deal with a nacelle fire more than 200 feet in the air or be sufficient to address public health and safety issues for the Project, as is purported by the PSS.	Local Fire Departments will not be asked to deal with a nacelle fire. In the extremely unlikely event of a fire in the nacelle, the Fire Protection Plans will ask that the local fire departments set a perimeter around the affected turbine to ensure that it does not impact at the ground level.
49	Wolanyk, E.	49.26	In regards to Section 2.3.3.2 of the PSS, the commenter states that this area is rife with fault lines as identified by the University of Buffalo. A full survey of the fault lines and predicted significant quake should be assessed by contacting the program at the University of Buffalo and determining whether this area provides too significant a risk to proceed. Commenter believes Lighthouse Wind should develop a plan to deal with a major earthquake and can't simply state the impacts will be turbine collapse and other than required setbacks that no mitigation is required. In addition, commenter notes that since 2014 there have been 309 reported incidents of turbine collapse and/or blade throws. Blades can be thrown 1600 meters from the tower. What plans are there to prevent this from occurring?	An assessment of seismic vulnerability will be included in Exhibit 21 of the Certificate Application. This will include a review of publicly available resources, manufacturer data regarding seismic rating, and site-specific geology and soil information obtained through geotechnical investigations. Specific discussions with the University of Buffalo are not anticipated to be required in order to sufficiently describe existing seismic conditions. Mitigation measures will be included in the Application based on the assessment of seismic vulnerability. Lighthouse Wind will take blade throw into account in developing the Project layout.
49	Wolanyk, E.	49.27	Commenter states that stray voltage is a significant problem to dairies where electric milking machines are attached to the living tissue of the cow's udder. Stray voltage issues should be carefully explored not just for human safety but also that of animals (both farm and wild) and dairy farmers should be provided guarantees that it will not be an issue to reduce milk production or an avenue for recompense if it becomes an issue. In addition, a procedure needs to be developed for those farms that do not sign leases if stray voltage becomes a problem for their operations.	The electric facilities of Lighthouse Wind will be constructed according to the most current versions of the National Electric Safety Code (NESC) and any other relevant standard. Construction based on the NESC effectively eliminates the risk of stray voltage effects from the windfarm as most of which are caused by improper local grounding installations, and as such, no further study of stray voltage issues is anticipated.  Because the wind turbines are not directly connected to the local electric distribution network serving farms and dairies, it is not anticipated that the new facilities will place any additional currents or voltages on the local network. This is important because the source of stray voltage is mostly due to improper grounding and connections to the electrical service to the dairy itself.  Secondary causes of stray voltage are improper connections or imbalanced current in the local electrical distribution systems in the area. Generating facilities do not directly connect to the farm or to the local distribution system, and therefore are not likely to be a primary contributor of stray voltage for dairy or other livestock operations.
49	Wolanyk, E.	49.28	Commenter notes that beyond the construction phase of the Project, the release of lubricating and hydraulic fluids from broken seals in nacelles and during fires needs to be addressed for the life of the industrial wind turbines until their removal.	Spill prevention and response plans to be developed for the Project will incorporate spill procedures and response mechanisms for life of the Project (Construction, Operation, and Decommissioning).

**Lighthouse Wind Project Case No. 14-F-0485**

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
49	Wolanyk, E.	49.29	Commenter notes that since the proposed industrial wind turbines will be sited on farms with livestock and employees actively farming the land adjacent to the industrial wind turbine their safety (in regards to blade throw/tower collapse) needs to be addressed beyond that of the general public. They will be the individuals and life forms most at risk.	Comment noted.
49	Wolanyk, E.	49.30	Commenter would like Lighthouse Wind to develop a mechanism within the Complaint Resolution procedure for farm's to be reimbursed for losses to milk production or animal loss due to stray voltage. In addition, a procedure needs to be developed for those farms that do not sign leases if stray voltage becomes a problem for their operations.	The electric facilities of Lighthouse Wind will be constructed according to the most current versions of the National Electric Safety Code (NESC) and any other relevant standard. Construction based on the NESC effectively eliminates the risk of stray voltage effects from the windfarm as most of which are caused by improper local grounding installations, and as such, no further study of stray voltage issues is anticipated. Because the wind turbines are not directly connected to the local electric distribution network serving farms and dairies, it is not anticipated that the new facilities will place any additional currents or voltages on the local network. This is important because the source of stray voltage is mostly due to improper grounding and connections to the electrical service to the dairy itself. Secondary causes of stray voltage are improper connections or imbalanced current in the local electrical distribution systems in the area. Generating facilities do not directly connect to the farm or to the local distribution system, and therefore are not likely to be a primary contributor of stray voltage for dairy or other livestock operations.
49	Wolanyk, E.	49.31	Commenter would like to know if the Fire Protection and Emergency Response Plan will include the purchase of appropriate equipment for each of the fire departments to access fires at a height of 200+ or- feet. Or will the departments be expected to let fires burn out and keep people away from falling debris that is on fire? Or will they be expected to put out a grass fires caused from falling debris? What then of any toxic waste that may result?	As stated in the PSS, development of the Fire Protection and Emergency Response Plan will be developed in consultation with local first responders and other emergency agencies.
49	Wolanyk, E.	49.32	In regards to PSS Section 2.3.4 on pages 23-27, the commenter remarks that there is no substantial information contained within the section and they cannot respond if there are no plans to respond to.	The intent of the PSS document is not to include an assessment of potential impacts. The Certificate Application will include discussions on avoidance and minimization of adverse impacts for each environmental impact analyzed. Following the submittal of the Certificate Application, commenters will be allowed an additional comment period to ask questions pertaining to the content of the Application.
51	Kahn, A. (Rochester Birding Association)	51.17	Commenter notes that at least temporary impacts to well water are possible	The Certificate Application will include an assessment of potential impacts to nearby water wells in Exhibit 23: Water Resources and Aquatic Ecology
61	Liuzzi, N.	61.2	Commenter expresses general concern regarding human health.	Lighthouse Wind is committed to conducting a comprehensive literature search on completed international research on wind turbines and health effects included in Exhibit 15 of the Certificate Application.
66	Mullane, P.	66.1	Commenter notes that the biggest concern of theirs is with infrasound and that even though Lighthouse Wind continues to refute these studies, there are too many peer reviewed studies to ignore the facts that infrasound is real, and is detrimental to human health in many ways.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects included in the Certificate Application. The research will address the information being requested on infrasound.
71	Herriwen, B. and G.	71.1	Form letter discusses infrasound and specific illnesses (Vibro Acoustic Disease and Wind Turbine Syndrome) caused by infrasound and low frequency noise. Commenter states wind farms that are close to homes cause human illness and requests the Lighthouse Wind Project is stopped.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects included in the Certificate Application. From Dr. Olsson's letter to the Niagara Board of Health, dated December 2, 2015, these conditions have not been recognized by the broader scientific community.
95	Vacco, D. (Town of Somerset)	95.26	The Town of Somerset requests that Lighthouse Wind completes a proactive baseline health study prior to any construction in order to prove to the community that there are no adverse health impacts. The commenter references their expert, J. Punch, and his separate letter ( <b>Letter ID 41</b> ) for further comments.	Lighthouse Wind believes the weight of scientific evidence demonstrates that a baseline health study is not required prior to the construction of the Project. Lighthouse believes the evidence supports the position that a properly sited wind project will not result in adverse health effects in the community.  Lighthouse Wind is aware of J. Punch's views on the topic although we do not believe they are supported by the scientific literature on the topic. Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects included in the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.9	Commenter (Town of Somerset) would like Lighthouse Wind to remove what they claim are irrelevant statements in PSS about significant positive impacts to public health. Commenter notes that these statements presume that the Project will result in the closing of other types of energy generating stations and this may not be the case.	The Project represents an abundant source of clean energy and would help to stem greenhouse gas emissions and carbon emissions attributed with the burning of fossil fuels such as coal and natural gas. As has been stated in the EPA's Clean Power Plan, "With abundant clean energy solutions available, and building on the leadership of states and local governments, we can make continued progress in reducing power plant pollution to improve public health and the environment while supplying the reliable, affordable power needed for economic growth. By doing so, we will continue to drive American leadership in clean energy technologies" (Executive Office of the President, 2013).
95	Vacco, D. (Town of Somerset)	95.E9.10	Commenter (Town of Somerset) requests Lighthouse Wind remove the statement (from PSS) that "existing emergency services will be sufficient to address any public health and safety issues", stating this needs to be shown in the studies. Commenter asks how the ability of Mercy Flight to service this area will be affected by the Project. Include in the PSS how the studies will be coordinated with local emergency service providers.	The PSS, Section 2.3.1 states, "Existing emergency services in the vicinity of the Project are expected to be sufficient to address any public health and safety issues that may arise during construction or operation of the Project." The PSS also contains a table of Emergency Services in the Project Area which includes Mercy Flight. As stated in PSS Section 2.3.4.2.4, "Prior to construction, a Fire Protection and Emergency Response Plan will be developed in consultation with the Fire Departments that have jurisdiction over the Project site." Lighthouse Wind will include such consultation with all emergency service providers listed in the PSS.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E9.11	Commenter (Town of Somerset) requests that the statements concerning ice shedding, blade throw and tower collapse be removed from the PSS and substantiated through studies/calculations and case histories (see proposed Town law). The PSS should include the study and analysis of technologies to reduce or eliminate problems with ice shedding and blade throw (such as sensors and automatic shutdown of the turbines once problems are monitored).	Section 2.3 of the PSS describes a number of studies and measures to be undertaken with respect to construction, operations (Ice Shedding, Blade Throw/Tower Collapse, Stray Voltage, Fire, Lightning Strikes, and Gaseous/Liquid and Solid Wastes). These topics and studies will be discussed at length in Exhibits 15 and 18.
95	Vacco, D. (Town of Somerset)	95.E9.12	Commenter (Town of Somerset) requests that Lighthouse Wind utilize the new setback requirements recommended by the Wind Energy committee, which will be incorporated into the Town's new WECS Law.	Somerset has an existing zoning law addressing wind farm development, and for over three years, Lighthouse Wind has considered those standards and taken them into account in the development and siting of the Project. Those standards are specifically referenced in the PIP, the PSS, and result in the buildable location map included as Appendix C to this comment response document. Even though the Application is not required to consider proposed laws at this juncture, Lighthouse Wind has reviewed the setbacks proposed and has provided an extensive comment letter to the Town of Somerset, which is incorporated here by reference. In short
96	Kremer, K. (Save Ontario Shores, Inc.)	96.5	Commenter notes that Lighthouse Winds' relies on setbacks as the only mitigation required for blade throw and other issues in the PSS but there is no clarity as to how appropriate setbacks will be determined and who will have the ultimate decision. As with all of these setback regulations what is not clear is – on what basis will setbacks be established and revised and strengthened? What will the criteria be? For sound and flicker and ice there needs to be independent scientific data to assist with the formulation of meaningful setbacks. Residents of Yates and Somerset are calling for a comprehensive, longitudinal, scientific study to give meaning to setbacks, especially for infrasound and noise. Evidence from studies should be informed also by people who are currently living in similar situations. And if there is a doubt the more stringent setback must be used.	A list of setbacks is being compiled based upon current local laws and regulatory requirements. Specific information in regard to the setbacks used will be included in Exhibit 6 of the Certificate Application. Reports on the sound and shadow flicker of the Project will also be included in the Certificate Application as specified in the PSS.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.1	Richard R. James attachment: Commenter notes that their experience with other wind energy projects in New York, plus many other states and countries, has shown that setbacks of 1.25 miles or more are necessary to protect the more vulnerable members of the host community from adverse health effects and sensations. Lighthouse Wind should demonstrate that it can locate the wind turbines within the footprint of the proposed Project with a setback of at least 1.25 miles from any home and maintain sound pressure levels under 40 dBA and 50 dBC which have been observed at the other problem projects, both at residential structures and property lines.	The Project will be evaluated within the Project site, with a specific layout and actual receptors. These results will be compared to applicable criteria.
101	Joerg, C. (Attorney for Niagara County)	101.1	Niagara County (Commenter) specifically calls to the attention of the PSC the position of the Boards of Health, that adequate "health impact studies" be performed prior to, and for the purpose of informing the Article 10 Siting Board's full consideration of the proposal.	Lighthouse Wind believes the weight of scientific evidence demonstrates that a baseline health study is not required prior to the construction of the Project and that the evidence supports the position that a properly sited wind project will not result in adverse health effects in the community.
102	Behnke, H. (DPS)	102.34	DPS Staff recommends that Lighthouse Wind consult with the Niagara and Orleans County Boards of Health to: identify local public health interests, concerns and issues; determine sources of information that will be beneficial in addressing public health matters; develop recommendations for analysis and consideration in Project planning; and develop terms of stipulations that document results of consultations and agreements as to relevant content to be included in the Public Health and Safety Exhibit in the Article 10 application.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. Lighthouse Wind has contacted the Niagara and Orleans/Genesee Boards of Health to date as follows:  October 16, 2015: Sent package of information and an introductory letter with contact information to all members of both the Niagara Board of Health (BOH) and the Genesee/Orleans BOH. Several wind turbine noise and health studies were summarized and offered in printed form along with a thumb drive with the full studies.  October 22, 2015: Lighthouse Wind representative attends Niagara BOH meeting.  December 3, 2015: The Lighthouse team made a verbal and PowerPoint presentation at regularly scheduled Niagara BOH meeting. The team included representatives from Lighthouse Wind, Ollson Environmental, and Epsilon Associates. The Lighthouse team provided outline of the proposed Lighthouse project along with discussion of the process and permitting requirements, and detailed presentations on health and noise issues, with all participants taking questions by the board. Letters provided to the Niagara BOH are provided as Appendix L to this response document.  February 8, 2016: Lighthouse wind representative calls Orleans/Genesee Board of Health  February 12, 2016: Lighthouse wind representative calls Orleans/Genesee Board of Health  February 18, 2016: Lighthouse wind representative calls Orleans/Genesee Board of Health

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.35	DPS Staff notes that references to local wind turbine siting regulations and specified minimum setback distances reported in the PSS were established based on related turbine height restrictions which Lighthouse Wind otherwise identifies as being unduly restrictive. Appropriate setback distances for wind turbines that may significantly exceed the identified height restrictions will need to be addressed in detailed analysis and development of recommendations based on evaluation of relevant criteria including safety standards, operational impacts including operational noise levels, blade throw, tower collapse and ice shedding, turbine manufacturer recommendations.	If the selected turbine, or largest alternative turbine, described in the Certificate Application significantly exceeds the identified height restrictions in local siting regulations, the requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.36	DPS notes that the discussion of solid waste in Subsection 2.3.2.2.6 of PSS (Gaseous Liquid and Solid Wastes) should address slash, stumps, stones, non-merchantable wood waste, etc., from clearing and construction activities.	The requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.37	DPS notes that the application should include consideration of identifying school bus routes for construction planning and staging.	The transportation routing plan will include a review of areas of school bus service, as required in Exhibit 25 of the Certificate Application.
102	Behnke, H. (DPS)	102.38	DPS notes that the discussion in subsection 2.3.4.2.1 (Ice Shedding) should address setback distances in local codes that are related to the height limits now proposed to be exceeded by the Lighthouse Wind design.	The Certificate Application will review the sufficiency of setback distances in local codes based on the height of the selected turbine, or largest turbine alternative if a specific turbine has not been selected at the time of Application filing.
102	Behnke, H. (DPS)	102.39	DPS notes that in Subsection 2.3.4.2.2 (Blade failure & turbine collapse) of the PSS the height limit is exceeded by proposed Lighthouse Wind design.	The Certificate Application will review the sufficiency of setback distances in local codes based on the height of the selected turbine, or largest turbine alternative if a specific turbine has not been selected at the time of Application filing.
102	Behnke, H. (DPS)	102.121	DPS states that the public comments regarding potential adverse effects of the major wind turbine installation on Mercy Care emergency flight service within the Project Area should be addressed in the Application.	The requested information will be included in the Certificate Application.
104	Spitzer, D. (Attorney for Town of Yates)	104.4	Town of Yates notes that given that the Boards of Health of Genesee, Orleans and Niagara counties have filed documents in this case expressing concerns about adverse health effects caused by industrial wind turbine emplacements, the Town reserves the right to request a baseline human health study of town residents.	Lighthouse Wind believes the weight of scientific evidence demonstrates that a baseline health study is not required prior to the construction of the Project and that the evidence supports the position that a properly sited wind project will not result in adverse health effects in the community.
107	Orr, C.	107.1	Commenter states health studies should be required for the protection of the health, safety and welfare of all who live, work and play on the shores of Lake Ontario. The commenter requests that Lighthouse Wind prove by independent, peer reviewed scientists and health experts that wind turbines do not cause health impacts.	Lighthouse Wind believes the weight of scientific evidence demonstrates that a baseline health study is not required prior to the construction of the Project and that the evidence supports the position that a properly sited wind project will not result in adverse health effects in the community.
110	Isselhard, A.	110.3	Commenter believes there is false information posted on the Lighthouse Wind website. Commenter believes that there is evidence supporting that wind turbines pose a threat to public health, and uses the Hardscrabble Wind Project near Herkimer, NY as an example of residents who filed a lawsuit for serious noise and health problems.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind is committed to conducting comprehensive international research on wind turbines and health effects included in the Certificate Application Exhibit 15. Lighthouse Wind would like to note that the Health Canada 2014 comprehensive field based wind turbine study concluded "Overall, the following were not found to be associated with wind turbine noise (up to 46 dBA): a. self-reported illnesses (e.g., dizziness, tinnitus, prevalence of frequent migraines and headaches) and chronic health conditions (e.g., heart disease, high blood pressure and diabetes); b. indicators of stress (e.g., hair cortisol, blood pressure, heart rate, self-reported stress); c. sleep problems (self-reported and measured sleep quality); and d. self-reported quality of life and satisfaction with health.
111	Jarvis, C.	111.11	In regards to PSS Section 2.3, commenter states more research on the available emergency services provided in Table 2 should have been completed. Commenter also makes a comment that the Lighthouse Wind representatives at a local health board meeting stated that the health of the residents is not important.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As stated previously in this response document, several attempts have been made to contact local emergency services, including Lyndonville Fire Department, Barker Fire Department, other fire departments in the area, and Mercy Flight. Lighthouse Wind believes they have included all the appropriate available emergency services in the area in Table 2 of the PSS.  Lighthouse Wind has made no such comments regarding the importance of public health. Lighthouse Wind believes public health is very important and as such Lighthouse Wind is committed to a comprehensive review of international research completed on wind turbines and public health as part of the Certificate Application. We note, however, that the Health Canada 2014 comprehensive field based wind turbine study concluded "Overall, the following were not found to be associated with wind turbine noise (up to 46 dBA): a. self-reported illnesses (e.g., dizziness, tinnitus, prevalence of frequent migraines and headaches) and chronic health conditions (e.g., heart disease, high blood pressure and diabetes); b. indicators of stress (e.g., hair cortisol, blood pressure, heart rate, self-reported stress); c. sleep problems (self-reported and measured sleep quality); and d. self-reported quality of life and satisfaction with health.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM26	Corwin, K.	DMM26.1	Commenter expresses general objection towards Project and Article 10 process. Commenter notes research on the adverse health effects and environmental destruction of wind farms should stop future wind turbine developments. Commenter states that the public needs to be informed on the negative impacts and harmful effects of infrasound. Commenter references that the parliament of Germany's medical profession has called on its leaders to support a halt to further wind farm developments near housing until more research has been undertaken into the possible health impacts of low-frequency noise from wind turbines. Commenter expresses that an honest attempt to speak with residents living near turbines is needed. Commenter wants the turbines to be responsibly placed where they are not in close proximity to any residence, stating that the area is rural but also very residential.	Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the final application under Article 10. That said the commenter appears to be referring to a medical group in Germany that called for a moratorium on wind development. Lighthouse Wind notes that this was a group of physicians and not the official association. Lighthouse Wind believes it is appropriately siting the Lighthouse Wind project and that adverse health effects will not be experienced.
DMM64	Boal, J.	DMM64.1	Commenter expresses opposition to the Project, specifically asking: What if all of the studies showing there are health problems that are directly related to these wind turbines are right? What if me and my family begin experiencing health problems?	In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application and that a properly sited wind project will not result in adverse health impacts in the community.
DMM66	Smith, A.	DMM66.1	Commenter is concerned about impacts to homeland security helicopter flights along the shoreline. Commenter states "NIMAC has raised serious concerns with the potential project and its proximity to the Niagara Falls Air Reserve station Military operating area. Making the base less viable for future missions. There are numerous studies that show large Wind Turbines can interfere with radar and flight operations."	An assessment of potential impacts to transportation, including flight and radar operations, will be included in Exhibit 25 of the Certificate Application. An assessment of potential impact to NFARS and military flight operations will be included based on consultation with appropriate agencies such as the DOD and FAA, and a review of other wind farms in the vicinity of military flight operations. Lighthouse Wind has been in touch with NIMAC and verified that they have a concern, but are waiting for final project designs and plans to make any determination on actual impact. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
DMM69	Bronson, C.	DMM69.1	Commenter notes that they see two C-130s from NFARS pass directly over their house at extremely low altitudes on a daily basis. Commenter asks, "What will happen to the operations of these flights when there are 600' high wind turbines stretching 25 miles across the lake shore?" Commenter is concerned about impacts on homeland security, impacts to the Remotely Piloted Aircraft Mission (MQ-9 Reaper), and the \$6.5 million C-130 simulator. Based on conversations with Dennis Vacco and Senator Rob Ortt the commenter believes the air base could be in jeopardy.	An assessment of potential impacts to transportation, including flight and radar operations, will be included in Exhibit 25 of the Certificate Application. An assessment of potential impact to the Niagara Falls Air Reserve Station (NFARS) and military flight operations will be included based on consultation with appropriate agencies such as the DOD and FAA, and a review of other wind farms in the vicinity of military flight operations.  With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
DMM81	Dudley, S.	DMM81.1	Commenter indicates that they visited a wind farm of a smaller scale in Sheldon (Noble Energy industrial wind facility) and after spending about 45 minutes there she had a migraine headache and stuffed, painful ears. Commenter is very concerned these impacts will be seen at her home as Lighthouse Wind is proposing turbines near her property in Yates/Lyndonville. Commenter indicates not all people may be affected by infrasound but she appears to be particularly vulnerable to its effects, perhaps due to ear issues she had in her 20's.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. This international research captures even those who are sensitive to noise. However, the research on infrasound does not suggest that people would be experiencing migraine headaches and painful ears.
DMM93	Hellert, C.	DMM93.1	Commenter indicates that she attended Lighthouse Wind presentation with the Niagara County Dept. of Health. Notes that consultants were brought in from Canada and New England to convince the board the only impact on health to residents would be annoyance. Commenter asks why residents must be subjected to annoyance. Commenter indicates she has researched adverse health impacts from IWTs and has spoken with medical health professionals who have treated patients experiencing sleep deprivation due to improper siting of turbines. Physicians treat based on anecdotal symptoms and don't disregard symptoms because they can't be proven in a lab or by modeling.	Dr. Ollson's, an international expert in health effects and wind turbines, was asked to respond to concerns by the Board of Health. In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. However, Lighthouse Wind believes that the work recently published by Health Canada and specifically by Dr. David Michaud, "Michaud et al., 2016. Effects of Wind Turbine Noise on Self-Reported and Objective Measures of Sleep. Sleep, Vol. 39, No. 1" stated, "sleep disturbance reported as a result of transportation noise exposure occurs at sound pressure levels that exceed WTN [wind turbine noise] levels calculated in the current study. Study results concur with those of Bakker et al. (2002), with outdoor WTN levels up to 54 dB(A), wherein it was concluded that there was no association between the levels of WTN and sleep disturbance when noise annoyance was taken into account". Lighthouse Wind believes this research is science-based evidence that a properly sited wind project will not adversely affect health.
DMM108	Elnisky, S.	DMM108.1	Commenter has a heart condition and is concerned about health impacts from the Project – specifically infrasound impacts on cardiac rhythms. Her doctor reportedly told her that people living near turbines are affected.	Lighthouse Wind cannot address specific comments made by the commenter's physician but, the weight of the scientific peer-reviewed published evidence does not indicate that those with heart conditions are adversely affected living in proximity to wind turbines.

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DMM115	Ferington, J.E.	DMM115.1	Commenter is concerned that Project-related stress is, and will, have health impacts on the community. Commenter states: "I have a number of patients, from that area, who have presented themselves with detrimental effect of stress. This stress is due to concerns for their health, their homes (investments) and their way of life."	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. We note that the Health Canada 2014 comprehensive field based wind turbine study concluded "Overall, the following were not found to be associated with wind turbine noise (up to 46 dBA): a. self-reported illnesses (e.g., dizziness, tinnitus, prevalence of frequent migraines and headaches) and chronic health conditions (e.g., heart disease, high blood pressure and diabetes); b. indicators of stress (e.g., hair cortisol, blood pressure, heart rate, self-reported stress); c. sleep problems (self-reported and measured sleep quality); and d. self-reported quality of life and satisfaction with health.
DMM120	De Marco, J.	DMM120.2	Commenter is concerned about health impacts from sub-sonic sound (infrasound?)	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. This will include the type of information being requested on infrasound.
DMM120	De Marco, J.	DMM120.3	Commenter is concerned about health impacts from light flicker.	The PSS Section 2.9.3 addresses the potential for shadow flicker and describes how it will be studied. The results of this study will be used to properly site the turbines and will be included in the Certificate Application.
DMM130	Stockman, G.	DMM130.1	Commenter would like a baseline health study to be done and is concerned about infrasound in particular, citing an October 30, 2015 New York Times opinion piece: "infrasound, sound waves of 20 hertz or less, mostly inaudible to the human ear. Our bodies can pick up these tiny vibrations through our skin and even our eyes. They register that something is not quite right, and have been shown to produce feelings of uneasiness, revulsion, fear and chills. This is the same process that alerts animals of a coming natural disaster."	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. This will include the type of information being requested on infrasound.
DMM136	Schwabel, Pa.	DMM136.3	Commenter notes that in Umatilla County, Oregon a setback of two (2) miles from a rural home or 20x the overall tower to blade height is required in order to protect the citizens.	There is significant experience in New York and the United States generally regarding the appropriate setbacks to minimize potential impacts to public health and safety. Lighthouse Wind has internal standards for setbacks and will seek to conform the Project to existing setback requirements in the local zoning laws of the Town of Somerset and the Town of Yates. Additional setbacks criteria based on regulatory requirements and guidelines from such agencies as the DEC, PSC, and Ag and Markets will also be considered. A setback map has been attached as Appendix D of this response document. The Company internal standards that are used only as a baseline are included in the narrative included in this response document.
DMM137	Hellert, R.	DMM137.1	Commenter recently had a myocardial infarction and is concerned about potential health impacts. Commenter states there are known impacts to the cardiovascular system from infrasound and vibrations.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. The weight of the scientific peer-reviewed published evidence does not indicate that those with heart conditions are adversely affected living in proximity to wind turbines.
DMM140	Hellert, C.	DMM140.1	Commenter is generally concerned about analysis of potential health impacts and infrasound in particular.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. This will include the type of information being requested on infrasound.
DMM142	Howard, S.	DMM142.6	Commenter asks how local communities will fund emergency personnel training and response to the Project.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As discussed in Section 2.3 of the PSS, a Fire Protection and Response Plan will be developed in consultation with local first responders and other emergency agencies for the Project and presented as a draft in Exhibit 15 of the Certificate Application which will include training and coordination with local fire departments.
<b>Noise and Vibration (PSS Section 2.4/Application Exhibit 19)</b>				
8	Smith, D.	8.2	Commenter asks when the assessment of level of noise will be completed.	A Noise Impact Analysis (NIA) will be completed as per Exhibit 19 of the Article 10 regulations, and submitted with the complete Certificate Application.
9	Hellert, C.	9.1	Commenter notes that noise standards utilizing the A-weighting is widely reported by acoustical engineers as being designed to underreport frequencies below 1,000Hz.	The A-weighting scale is defined by standard and is intended to respond to how humans hear sound. That being said, information on octave band frequencies of the wind turbines and the existing environment will be part of the NIA.
9	Hellert, C.	9.2	Commenter notes that there is no railroad in the Town of Yates as is reported in PSS Section 2.4.1 and the statement misleads that there is industrial area in the Town of Yates.	The PSS states there is an active CSX-owned rail line in the Project area. The CSX-owned rail line is in Niagara County. There is also a short-line rail line running from Lockport to Brockport.
9	Hellert, C.	9.3	Commenter requests that Lighthouse Wind reference every road and fire lane in the town of Yates and also states that there is no mention of sound studies to be done in these areas of extreme quiet.	The sound study will cover the entire Project area.
9	Hellert, C.	9.4	Responding to the PSS Section 2.4.1 the commenter states that the lakeshore area is not a moderately developed, suburban area and should not be compared as such. Commenter notes that failure to disclose the actual siting of the turbines is unacceptable in the PSS.	The lakeshore area comprises a combination of residences and open land. The anticipated layout of the wind turbines will be included in the Certificate Application.
9	Hellert, C.	9.6	Responding to the PSS Section 2.4.2.1 Commenter states that construction will not go unnoticed due to the location, with less than a mile between Rt. 18 and various Lake Shore roads, and that the area is not large enough to support construction or operation without having a huge noise impact.	As stated in the PSS, construction noise will be noticeable at some locations within the Project site. However, wind turbine construction is primarily a daytime-only activity, and is relatively short in duration (matter of months).
9	Hellert, C.	9.7	Commenter states that Lighthouse Wind is using old information regarding infrasound, and dose-response relationships cannot be determined without the specific turbine model to reference.	In accordance with the requirements of Article 10, low frequency and infrasound from the Project will be evaluated. A specific wind turbine model will be used for the analysis.

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9	Hellert, C.	9.8	Commenter states that acoustic emissions from industrial wind turbines pose a major health risk for residents living in close proximity, noted by effects reported and observed worldwide in areas up to 6 miles or further from wind turbines.	This statement is not supported by the scientific literature. A representative literature search and an assessment of the health-related studies of wind turbines will be evaluated and included in the Certificate Application.
17	Sokolow, A.	17.5	Commenter notes that because specifics regarding turbines have not been decided that worst case scenarios should be utilized (largest/noisiest possible turbines used) in determining setbacks for noise. Commenter requests that WHO guidelines for night time noise (35 dBA) should be utilized since the turbines are globally/internationally certified. States that WHO guidelines are missing from PSS. Also notes that complaints regarding noise shouldn't be limited to involved municipality as there are multiple municipalities involved with project.	The NIA will assume worst-case conditions for calculating expected sound levels from the Project in the area. There is no WHO noise guideline for outdoor noise at 35 dBA. A complaint resolution process will be included in the Certificate Application.
19	Spliethoff, H. (NYSDOH)	19.3	Commenter notes that the literature review of potential noise impacts should also address the potential of wind facilities like the Project to cause "annoyance" among local residents.	A discussion of current literature findings with respect to annoyance from wind turbines due to sound will be included in the Certificate Application.
19	Spliethoff, H. (NYSDOH)	19.4	Responding to the PSS on Page 31, the commenter notes that it is not clear whether six noise monitoring locations will be adequate to characterize ambient pre-construction noise levels across the full range of possible relevant locations throughout the 24,000 acre study area. Commenter requests description of how the choices of monitoring locations (e.g., proximity to other noise sources) could impact conclusions about facility noise impacts and would like justification for limiting the proposed monitoring to six locations.	It is not necessary to measure at every location throughout the Project area. Rather the "deterministic spatial sampling" technique discussed in ANSI S12.9 Part 3 was used where sites were selected to be representative of the sound levels of the total area around the site. For example, sound levels will be measured at a location within Golden Hill State Park to capture levels in that land use. Sound levels will be measured near a house on Somerset Drive to characterize sound levels at homes near the lakefront.
19	Spliethoff, H. (NYSDOH)	19.5	Commenter states that it would seem that ambient noise levels at relevant frequencies for a given location would be a function of wind speeds and directions over the course of the week of measurement. Commenter requests that the application include some discussion of the choice of monitoring weeks with respect to local wind patterns and potential effects on ambient noise measurements and conclusions about facility noise impacts.	As required by the Article 10 regulations in 1001.19, ambient sound levels will be measured during both the summer and winter season. By conducting each program for at least one week, the data will provide an indication of the wind speed and wind direction patterns in the Project site.
19	Spliethoff, H. (NYSDOH)	19.6	Commenter requests more detail on possible "industry standard practices" to be used for noise monitoring and would like Lighthouse Wind to compare these practices with those recommended in recent reports or literature.	The "industry standard" mentioned in this paragraph refers to the sound level meters to be used for measuring the ambient sound levels. These will be Type 1 sound level meters as recommended by ANSI S12.18 "Procedures for Outdoor Measurement of Outdoor Sound Pressure Level."
19	Spliethoff, H. (NYSDOH)	19.7	Commenter asks whether cumulative noise from proposed turbines will be modeled.	Yes, sound levels modeled from the wind turbines will assume all of the wind turbines are operating simultaneously.
19	Spliethoff, H. (NYSDOH)	19.8	Commenter asks Lighthouse Wind to consider comparing modeled noise impacts to other recommended noise guidelines for health protection such as those from the World Health Organization.	Operational sound levels from the wind turbines may be compared to WHO guideline values for informational purposes only.
19	Spliethoff, H. (NYSDOH)	19.9	Commenter states that discussion of modeled noise levels and relevant local standards is confusing in that it does not clearly indicate whether discussed noise levels are inclusive of project noise, wind induced noise and ambient noise, or project noise alone.	Any discussion of modeled operational sound levels from the Project is "wind turbine only" since that is the Project under consideration. The standards regulate sources of sound such as the proposed Project, not the existing wind itself.
36	Skinner, M.A & J	36.1	One concern of the commenter is the audible and low frequency noise produced both during the construction and operation of the proposed wind turbines. Commenter states that section 2.4 of the PSS Lighthouse Wind attempts to compare the ambient naturally occurring sounds of wind rustling through leaves and grasses to the unnatural clamor produced of heavy equipment and wind turbine generators. They (Lighthouse Wind) say this as if to say that there is little difference between them. Lighthouse Wind gives decibel values to construction equipment but fails to assign any such level to naturally occurring sounds. More importantly, they fail to assign any decibel level to the wind turbines. Could that be because none so large have yet been made?	Every wind turbine available for purchase on the commercial market must have completed extensive testing of acoustics, among many parameters. Therefore, sound level data for a wind turbine under consideration by the Project will provide acoustical testing data, and these data will be used in the NIA.
41	Punch, J. (on behalf of Town of Somerset)	41.8	Commenter notes that receptor sites must include workplaces and any other sites where people are likely to be exposed to turbine noise for hours at a time.	Sound levels will be analyzed at locations within the Project area that may be noise sensitive.
41	Punch, J. (on behalf of Town of Somerset)	41.9	In determining whether or not low-frequency noise or infrasound levels are "significant," commenter notes that it is incumbent that Lighthouse Wind does not base those determinations on the usual audibility threshold data, which were established by using steady pure tones, but on what is known about the audibility of dynamically modulated tones and noise.	Low frequency and infrasound levels from the Project will be evaluated against applicable standards and relevant criteria such as vibration and rattle, not just audibility.
43	Orr, C.	43.3	Commenter notes that in their experience living near the Invenergy wind farm in Orangeville, it is very difficult to live, concentrate, sleep or otherwise relax in your home when there is a continuous pulsating drone and WUMP, WUMP, WUMP, as three separate 150-200 Ft long blades each pass the industrial wind turbine tower. Commenter continues and says the sound varies depending on amount of wind and the temperature, dampness, etc. and that winter and spring noise will be even more intolerable as the leaves are gone off the trees.	The sound level study for this Project will include winter conditions, including the fact that no "credit" is taken for any sound reduction due to leaves on the trees. In other words, a "Leaf-off" winter condition. These results will be included in the Certificate Application.
43	Orr, C.	43.4	Commenter notes that another kind of noise generated by wind turbines is likened to a high pitched whine similar to the sounds a jet engine makes when coming in for a landing except that it never lands (It's continuous). Commenter expresses that only those who have lived under the turbines could understand this.	With proper siting, no residences should be "under the turbines" and this Project will ensure that does not happen. When wind turbines are operating in a steady wind condition, the sound generated by a wind turbine may also be steady. The level of this sound will be calculated as part of the NIA and presented in the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
43	Orr, C.	43.5	Commenter notes that night-time noise sounds louder when the ambient noise of the countryside is less, with most sound studies finding ambient nighttime noise of the quiet countryside being approximately 25 decibels and independent sound studies have registered wind farm projects as 70+ decibels at night depending on weather conditions. Every 6 decibel increase is perceived as doubling of the noise. Commenter also concerned about unusual night-time noises coming from industrial turbines, combined with industrial size disk brakes which grind and creak and get louder with age, notwithstanding the vibration from infrasound which reportedly permeates houses and can be felt as well as heard.	Actual ambient sound levels in the Project area will be presented in the Certificate Application. Expected sound levels from the wind turbines will be modeled at each house in the Project area and presented in the Application.
43	Orr, C.	43.6	Commenter states that the Dec 2, 2015 letter Lighthouse Wind provided to the Niagara County Health Board concerning health studies and safety of wind turbines was misleading. Robert D. O'Neal stated "When winds are calm and wind turbines are not operating, there is still low frequency and infrasound energy in the community." Commenter notes that even though winds may be calm at ground level, wind turbines still frequently operate and this is an important component of industrial wind turbine noise. The wind turbines hub height is at least usually 200 ft. and with the bigger models that Lighthouse Wind is trying to site the hub could conceivably be higher. As the day is ending and throughout most of the night atmospheric layers separate and wind speeds in the elevated atmosphere are greater, so the wind turbines can operate at wind speeds above 15mph. The calm nights which are quieter at ground level results in no masking effects from the noise of wind generated turbines. The commenter notes that in temperate zones, this phenomenon would be the case about 50% of the time. "Wind turbines operate more often at night, making the noise louder and more pronounced at night, when most people are trying to sleep. Most complaints from wind projects that are in operation come from night-time noise." (Erik Rudolphi, Ingemansson Technology AB 2003).	This is a common misconception. Wind turbines may operate when the ground level winds are light but not calm. This is possible under strong wind shear conditions which may occur under a temperature inversion condition. The sound modeling will assume a moderate temperature inversion is present when calculating expected wind turbine sound levels from the Project.
43	Orr, C.	43.8	Commenter notes that Eja Pedersen, the author of "Human response to wind turbine noise" (2007), whose publication was used by Lighthouse Wind to incorrectly assert its premise "that annoyance occurs for non-acoustical reasons," never stated just that in his report. Pedersen's publications are based on a dissertation that found annoyance could be increased by visual prominence but that visual prominence was a secondary cause. The primary cause of annoyance is acoustical. "Wind turbine noise is easily perceived and is annoying even at low A-weighted SPL's. [sound pressure levels]. This could be due to the perceived incongruence between the characteristics of wind turbine noise and the back ground." (Pedersen 2007 dissertation)	In the Pedersen paper, some people were annoyed no matter what the sound levels were prompting the conclusion that other characteristics, such as visual, may cause people to be annoyed from a source of sound.
47	Salmons, S.	47.5	Commenter notes that they have read that many of these projects are built non-stop, night and day and asks what will it be like to live for years with the inconvenience and noise of construction?	Construction at a wind farm such as this is generally a "daytime only" activity with some exceptions. The majority of construction is expected to be completed during one construction season (approx. 1 year) and not over the course of several years.
49	Wolanyk, E.	49.16	Commenter asks about the impact of blasting 30-40 feet into the bedrock to lay foundations containing 62 tons of concrete and rebar for each of 70 industrial wind turbines? Section 2.4.2.1 of the PSS does not address blasting in any form yet it acknowledges that blasting is possible; only addresses it in relation to noise impacts. Commenter asks what of the impact to the land, ground water, wildlife, building foundations, roads, etc.?	After the geotechnical investigations have been completed for the Project, and if it is then determined that blasting may be required in certain areas, blasting procedures would be developed and included within Exhibit 21 (Geology, Seismology and Soils) of the Certificate Application. Blasting procedures would include reasonable mitigation measures for blasting impacts, including an assessment and mitigation measures for potential impacts to environmental features, above-ground features (i.e. buildings, roads), and below-ground features such as pipelines and wells.
49	Wolanyk, E.	49.33	Commenter states that there is no reference to blasting in PSS section 2.4.2.1. Later in the PSS such a need has been identified. If the foundations for these industrial wind turbines are to go 30-50 feet into the ground it is very likely that Lighthouse Wind will be blasting into bedrock which in some of these areas is just below three feet of the surface soil. Blasting and its impact on noise, disturbance of people and animals, and impact on fault lines must be addressed.	After the geotechnical investigations have been completed for the Project, and if it is then determined that blasting may be required in certain areas, blasting procedures would be developed and included within Exhibit 21 (Geology, Seismology and Soils) of the Certificate Application. Blasting procedures would include reasonable mitigation measures for blasting impacts, including noise and vibration.
49	Wolanyk, E.	49.34	Commenter notes that in section 2.4.2.2 of the PSS Lighthouse Wind did not include any effect such as motion sickness/air sickness (noting this affects some people and is significant for those affected), nor is it acknowledged that those who suffer from migraine headaches are also affected by infrasound. Commenter also mentioned that since only about half of the leases required for the proposed Project have been obtained Lighthouse Wind's claim of proper siting to mitigate the problems hits a false note. Commenter believes that Lighthouse Wind will need to cram as many turbines onto the existing land as possible. Commenter also mentions that existing noises that have been included in PSS baseline sounds are short term such as a tractor working a field once during planting for several hours, once again during harvest for several hours, a truck driving by, or a mower operating. Commenter says that these sounds are not continuous and constant noise. Commenter states that comparisons can't be made between these sounds and annoyance for those disturbed by the sound and infrasound of the turbines.	The sound level measurements will be conducted 24 hours/day so as to capture all sources currently operating in the community for both short-term and longer term. An actual wind farm layout will be used to conduct the sound level modeling. This work will show sound levels throughout the Project area through a series of isopleths (lines of equal sound), and will be included in the Application.

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Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

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52	Pellicano, S.	52.1	Commenter references exhibit 19 which claims noise impacts from construction are not anticipated to be significant. Commenter claims significant is subjective and open to interpretation. References table 3 provided by Lighthouse Wind listing noise levels of various pieces of equipment. Commenter assumes that if more than one piece of equipment is running; say a single dozer, dump truck, and a backhoe, that cumulatively the sound level could possibly be over 200 dBA.	Lighthouse Wind notes that sound levels are on a logarithmic scale and are therefore not additive. If more than one piece of equipment is operating near a house, the sound levels will be dominated by the loudest source. If they are equal, the new total will be 3 decibels higher. It will never be 200 dBA.
52	Pellicano, S.	52.3	Commenter states that because children can't just leave their environment that a temporary amount of time and exposure to an adult can feel more permanent to a child. A child, when aggravated by their environment, can develop irritability, inattentiveness, sleep disturbance, anxiety, despair and aggressive behavior. Commenter notes that children are more vulnerable to noise pollution as they have no knowledge of and are not able to mitigate effects. Vibration frequency, intensity, periodicity, and duration all factor in. Commenter includes a table from WHO regarding children and noise. Comparing this to typical noise impacts from construction provided by Lighthouse Wind commenter claims you can see that project poses risk to children and therefore endangers the welfare of the children.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. At this point we are not aware of any scientific research that has been published that suggests that children have been adversely impacted by any operating wind projects.
95	Vacco, D. (Town of Somerset)	95.27	Regarding PSS Section 2.4, the commenter remarks that Lighthouse Wind makes a conclusory statement that sound levels along the Lake Ontario shoreline are expected to be typical of moderately developed suburban areas. The commenter states the Lake Ontario shoreline in Somerset is not a suburban area and that the erroneous statement to the contrary should be removed to avoid confusion.	The characterization of the area around the lakefront will be revised after actual sound levels are measured.
95	Vacco, D. (Town of Somerset)	95.28	Regarding PSS Section 2.4, Town engineer opines that the collection of noise level data at six (6) locations seems to be totally inadequate. Instead, background noise levels should be obtained at all sensitive receptors. The town engineer also requests that Lighthouse Wind identify and analyze technology changes and methods to reduce noise impacts.	It is not necessary to measure at every location throughout the Project area. Rather the "deterministic spatial sampling" technique discussed in ANSI S12.9 Part 3 was used where sites were selected to be representative of the sound levels of the total area around the site. For example, sounds levels will be measured at a location within Golden Hill State Park to capture levels in that land use. Sound levels will be measured near a house on Somerset Drive to characterize sound levels at homes near the lakefront. Mitigation for noise impacts will be discussed in Exhibit 19 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.29	Regarding PSS Section 2.4, commenter requests that the specific type of turbine for the Project be identified and that actual operational noise results be obtained, instead of only manufacturer data.	The Certificate Application will identify and analyze a proposed wind turbine for this Project.
95	Vacco, D. (Town of Somerset)	95.30	Regarding PSS Section 2.4, Town of Somerset specifically adopts and incorporates the comments provided by attorney Gary Abraham and acoustics expert Rick James (Letter ID 100).	Comment noted.
95	Vacco, D. (Town of Somerset)	95.E9.13	Commenter requests the statement that sound levels along the Lake Ontario shoreline are expected to be typical of moderately developed suburban areas be removed, as the commenter states these are not suburban areas.	The characterization of the area around the lakefront will be revised after actual sound levels are measured.
95	Vacco, D. (Town of Somerset)	95.E9.14	Commenter would like Lighthouse Wind to identify how long construction noise will take place. In this regard, identify other mitigations for the long term construction related noise impacts (for example; no construction on the weekend, etc.).	This information will be provided in Exhibit 19 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.15	The commenter remarks the collection of noise level data at six (6) locations seems to be totally inadequate. Commenter requests background noise levels be obtained at all sensitive receptors and how these will be identified be provided in the PSS document.	It is not necessary to measure at every location throughout the Project site. Rather the "deterministic spatial sampling" technique discussed in ANSI S12.9 Part 3 was used where sites were selected to be representative of the sound levels of the total area around the Project site. For example, sounds levels will be measured at a location within Golden Hill State Park to capture levels in that land use. Sound levels will be measured near a house on Somerset Drive to characterize sound levels at homes near the lakefront. Mitigation for noise impacts will be discussed in Exhibit 19 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.16	Commenter notes that the specific type of turbine for this Project should be identified and actual operational noise results should be obtained (not just manufacturer's data).	This information will be provided in Exhibit 19 of the Application.
95	Vacco, D. (Town of Somerset)	95.E9.17	Commenter requests that Lighthouse Wind identify and analyze technology changes and methods to reduce noise impacts.	This information will be provided in Exhibit 19 of the Application.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.6	Commenter insists that the way Lighthouse Wind describes the existing noise is inaccurate and is for the purpose of presenting data the way they desire it to be rather than informed by the conditions. Commenter is concerned that the placement and timing of the sound monitoring devices will distort the ambient sound baseline. Commenter states that Lighthouse Wind's ongoing activities such as the PIP and the signing of leaseholders before anyone knew about the Project, and its failure to respond with any real information to ongoing questions, and finally its inability to include local concerns in this PSS, have established a lack of trust between residents and Lighthouse Wind. Commenter requests that the sound monitoring be completed by an independent group.	The existing condition sound level monitoring will be done by an independent acoustical consulting firm retained by Lighthouse Wind.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
96	Kremer, K. (Save Ontario Shores, Inc.)	96.7	Commenter expresses a concern that describing the lakeside cottages as similar to a moderately developed, suburban area is not at all accurate and the missing piece of Lighthouse Wind's description of existing conditions are nighttime conditions. Commenter states that nighttime in the rural area is quiet: very, very quiet. Commenter asks why wouldn't Lighthouse Wind list the most problematic noise factor in rural areas for industrial wind (people being used to a very quiet night) in the description of existing conditions.	Sound levels will be measured 24 hours per day.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.4	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter indicates that information from the peer-reviewed literature about the effects of noise and vibration on wildlife species and their behavior should be included in this assessment (sec. 1001.22(f)).	Sound and vibration from wind turbines have not been demonstrated to be any more significant than other man-made sources of sound which already exist in the area. No wildlife noise and vibration studies are proposed for this Project.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.2	Richard R. James attachment: Commenter states that studies show that increasing the listening radius for wildlife has a negative impact on their survival and can lead to depopulation. Given that these locations have natural nighttime background sound levels of 20 to 30 DBA during the time that mating and foraging is most likely to be conducted, the proposed Project will present a very significant reduction in listening radius. Commenter continues and says that considering that at the base of a wind turbine sound levels can easily be 50 DBA or higher; and that sound levels will greatly exceed the natural background sounds when they are operating it is incorrect to assume that the only impacts of wind turbines are within short distances from the towers. Commenter believes that Lighthouse Wind should conduct a search of the National Park Service and other agencies research into listening radius and the impact of a new noise source and wildlife survival and then demonstrate that their project will not cause the significant impacts on wildlife that has reportedly been shown to occur in literature.	Sound and vibration from wind turbines have not been demonstrated to be any more significant than other man-made sources of sound which already exist in the area. No wildlife noise and vibration studies are proposed for this Project.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.3	Richard R. James attachment: Referencing Section 2.1.2 of the PSS, the commenter states that noise from operating wind turbines, especially at night is a potentially significant adverse impact and that this section of the PSS misses the point that noise impacts on people and wildlife are significant. Commenter believes this is a lack of sensitivity and it appears to them to be repeated throughout the entire PSS. Commenter requests that a final scoping statement needs to take these concerns seriously and not dismiss them by exclusion or by using industry-standard talking points that mischaracterize them. If the absence of noise as an impact in the section is not due to oversight but is the actual opinion of Lighthouse Wind they should state the basis for this opinion with supporting evidence that addresses the literature from experts in acoustics and health who have reached different research-based conclusions, including WHO, ISO, ANSI/ASA and USEPA guidelines. Commenter believes section 2.1.2 should be completely revised to address not only the impacts that Lighthouse Wind wishes to address but also those that they would prefer to ignore.	The impact analysis will evaluate objective criteria, both absolute and relative, to determine if there is an adverse impact. The fact that people may hear sound from a wind turbine does not mean it is automatically a significant adverse impact.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.4	Richard R. James attachment: Commenter states that the first three paragraphs of section 2.4.2 of the PSS raise an entirely specious argument that purports that normal community and natural sounds will be so high as to mask the sounds that wind turbines make. The character of wind turbine noise is distinct and easily distinguished from these other sounds. Further, the idea that other community and natural sounds will mask wind turbine noise is entirely without foundation in acoustics, particularly for noise at night from a source that emits significant low frequency, tonal energy with amplitude changes. One sound will not mask another sound unless it has the same frequency and temporal characteristics. Normal community sounds, particularly those at night, sound nothing like the roar, whooshing, and throbbing sounds people who live near wind turbines report as sources of their sleep disturbance or other complaints.	This discussion never claimed that existing sound sources in the community will mask any future wind turbine sound. Rather, the point is that the Project site is not silent -- there are many existing sources of sound today, both natural and man-made, in the community.
1.00E+02	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.5	Richard R. James attachment: Commenter notes that whilst sound traveling through dense forest does attenuate more rapidly than it would over lands without tall vegetation, wind turbines are so tall that the sound from one to a receiving location even at great distances will never pass through the trees for any attenuation to occur. This is another example of an industry talking point being presented as scientific facts in the PSS. The elevated noise sources of wind turbines do not fit the assumptions used in the acoustical models chosen by developers as "industry standard practice" in a number of areas. For example, the standard sound propagation models are not designed for elevated noise sources with significant low frequency content.	The modeling for this Project will not take any sound reduction "credit", or attenuation, due to trees or other foliage.

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100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.6	Richard R. James attachment: Commenter states that the offer by Lighthouse Wind to conduct sound monitoring of ambient sound levels shows misunderstanding of NYDEC guidelines for assessing a new noise source. There is a distinct difference between ambient sound levels which are the all-encompassing sound levels present at a measurement location and background sound levels, which is the sound that exists when short-term transient sounds (vehicles, children playing, people talking, barking dogs, etc.) or seasonal or weather induced sounds (leaf rustle, insect and bird sounds, etc.) are not present. The appropriate standards are the current versions of: ANSI/ASA S12.9 Part 3 (R2013) Short Term Measurements with an Observer Present. And, ANSI/ASA S12.100-2014, Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas	Sound levels will be measured 24 hours per day, for at least 7 consecutive days. Sounds which occur in the community today will not be disregarded, whether they are short-term events or not. Various sound level statistics (L90, etc.) will serve the function of "filtering" out short-term events, and will be reported in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.7	Richard R. James attachment: Commenter notes that whilst some sections of the PSS at 2.4.2.2. provide indication of the characteristics of wind turbine sounds Lighthouse Wind fails to disclose that these sounds are distinctive and can be heard above the natural background sound levels for distances up to 1.25 miles (2km) and can be felt (related to the pressure pulse created as the wind turbine blade passes the tower on the blade's down-stroke) at distances of 2 ½ miles or more. It can be anticipated that a substantial number of residents within these distances will find that wind turbines have completely and drastically altered the characteristics of the soundscape of their community. Lighthouse Wind asserts that modern upwind design utility scale wind turbines do not produce the infrasonic pulses that are perceived at the greater distances by vulnerable people and that was only characteristic of older downwind style wind turbines that are now obsolete. Commenter claims this isn't true and that modern utility scale upwind turbines of the type that Lighthouse Wind may select are much larger and though the blade is in front of the tower from the point of view of the wind direction, the tower still acts to slow the wind sufficiently that when the blade enters into this region of slower wind, the forces pushing it back are reduced and the blade moves forward creating a pulse of pressure at frequencies of 1 Hz or lower (depending on hub rpm and for a three bladed wind turbine). Commenter asks that Lighthouse Wind educate itself about the literature that shows how these pulsations are produced and how they propagate. Commenter states this will require that Lighthouse Wind includes the research of acousticians like Dr. Malcolm Swinbanks, Robert Rand, Steven Ambrose, Steven Cooper, Dr. Paul Schomer (Director Emeritus, of the ASA Technical and Standards Committee) and the commenter.	Whether the sound from the Project is audible, or not, is irrelevant. The Certificate Application will include a discussion of current science on infrasound as it relates to the proposed wind turbines for this Project.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.8	Richard R. James attachment: Referencing Page 30 of the PSS at the paragraph beginning with "In almost all cases...." the commenter claims that this paragraph and the preceding lists identify just a few of the symptoms experienced and reported by people living near wind projects. A study conducted by the University of Waterloo for the Ontario government found that tinnitus increased as the distance between homes and wind turbines decreased. (Wind Turbine Noise, Sleep Quality, and Symptoms of Inner Ear Problems, Paller, Bigelow, et al. Presented at the Symposium on Sustainability, October 17, 2013, York, University, Toronto, Ontario – part of the Symposia of the Ontario Research Chairs in Public Policy. In Ontario no wind turbine can be closer to a home than 500m. so this sample included many homes at greater distances. The Waterloo study shows that setbacks of 500m are inadequate to protect against adverse health effects. Lighthouse Wind lists three sets of "noise impacts" starting with "subjective effects, including annoyance, nuisance, and dissatisfaction." Claiming that these impacts are subjective misrepresents the role annoyance in any of these forms plays in affecting one's health. Lighthouse Wind should incorporate the findings from many sleep studies (for references see the WHO 2009 document) and take these into consideration when they decide whether there is sufficient distance between wind turbines and homes to prevent nighttime noise disturbance and its related health effects. It is these health effects that support setbacks of 1.25 miles (2 km).	Guidelines such as the WHO Community Noise Guidelines (1999) and the WHO Night Noise Guidelines (2009) will be discussed, and Project sound levels evaluated against, in the Certificate Application.

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100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.9	Richard R. James attachment: Commenter claims that while the narrative and bullet list provided on page 30 of the PSS represent the desired output from such a model, ones that I fully support, the technology of sound propagation modeling is insufficient to produce results that are accurate and reflect the characteristics of the wind turbine noise that lead to adverse health effects. The underlying problem is that the computer model, which will be based on an ISO standard called ISO9613-2 "Acoustics-attenuation of sound during propagation outdoors-Part 2: General method of calculation." This standard has an equivalent ANSI/ASA standard that is appropriate when addressing sound models in North America; however wind industry noise impact studies of the type described as "industry standard practice" focus on the ISO standard. It is not accurate to describe a 100m. diameter set of blades spinning around a hub located 90-100 meters above ground as a "point source." The standards state that for models that meet all of the restrictions stated in the standards that the accuracy at 1000 m is only +/- 3 dBA. For distances greater than 1000 m or for noise sources that are taller than about 30 m or have significant infra and low-frequency sound, there is no valid application for these models. Under these real-world conditions wind turbines produce considerably more noise. Any use of computer models needs to acknowledge that the model algorithms are not validated for the type of noise and height of modern utility scale wind turbines. Lighthouse Wind must consider the above and not resort to "industry standard practices" in conducting its modeling for its project. For sound propagation of sound from 0 Hz to the 31 Hz octave band Lighthouse Wind must apply better technology than is available in either the ISO or the ANSI standards. If this is not possible, they should establish their setbacks based upon the distances found in recent research by Cooper, Swinbanks, myself, and other acousticians who have actually measured these low-frequency sounds at levels perceptible to people at distances of 1.25 miles and greater.	Post-construction sound level modeling conducted at other operating wind farms has confirmed that the ISO 9613-2 propagation standard does a reasonable job in predicting sound levels from wind turbines. This is the standard that will be used for this Project.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.10	Richard R. James attachment: Commenter requests that Lighthouse Wind address the recent studies and papers by the acousticians who I have mentioned several times in their comments. Second, they should put weight on studies that use the appropriate measurement methods for identifying the dynamically modulated characteristics of wind turbine sound and not on studies that used averaged results. Studies using averaged results cannot identify the pulsations in the infrasonic range, and therefore lead to erroneous conclusions.	Valid, peer-reviewed literature will be used to evaluate noise-related items listed in Exhibit 19 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.11	Richard R. James attachment: Commenter requests that the NIA's inventory be expanded to also include workplaces and any other area where people may spend a significant amount of time before returning to their homes. Given that the effects of wind turbine sound have been documented to distances of 2 miles or more the radius of this inventory should be greatly expanded.	Expanding the area of analysis beyond 2 miles does not provide any additional benefit from an acoustics perspective. If sound levels from the Project meet acceptable criteria and guidelines at locations less than 2 miles from a wind turbine, then sound levels beyond 2 miles will be even lower, and thus continue to meet relevant criteria and guidelines.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.12	Richard R. James attachment: Commenter requests that Lighthouse Wind should conduct background studies using appropriate test locations that are not contaminated by nearby noise sources during periods when surface winds are low enough that they do not influence the background sound level or cause microphone artifacts (pseudo noise) and provide the results of those studies with supporting documentation showing the sound levels at the microphone and the observer's notes to support their findings. Commenter claims that having conducted many such studies in New York and other states in the US in similar communities any findings by Lighthouse Wind of nighttime background sound levels above 30 dBA should be considered suspect.	Sound levels will be measured 24 hours per day, for at least 7 consecutive days. Sounds which occur in the community today will not be disregarded, whether they are short-term events or not. Various sound level statistics (L90, etc.) will serve the function of "filtering" out short-term events, and will be reported in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.13	Richard R. James attachment: Commenter notes that current modeling methods cannot accommodate sounds that vary in amplitude over time. The models produce a long-term average. Thus, short-term sounds whether it is backup beepers, engine and exhaust sounds, sounds from digging foundations, etc. will always be represented as their long-term average which will be considerably less than the short-term sounds the cause annoyance. Commenter asks that Lighthouse Wind consider the limitations of its modeling methods and acknowledge that any predictions will not reflect the true annoyance value of the construction related noise.	Both average (equivalent sound levels, Leq) and maximum (Lmax) sound level data are available from the construction literature. Wherever possible, both of these will be used to characterize expected construction sound levels.

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.14	Richard R. James attachment: In regards to operational noise modeling noted on page 32 of the PSS, the commenter claims that the results of this model cannot predict whether or not there will be significant levels of low frequency noise or infra-sound produced by the Project in received at the property lines in homes of members of the community. There are no commercially available models capable of addressing wind turbine acoustic energy in the frequency range from 0 to 10 Hz where the blade pass tones and pulsations are present or for the frequency range, including the 31.5 Hz octave band down to 10 Hz. Lighthouse Wind needs to acknowledge the limitations of current technology for predicting impacts and provide a sufficient safety factor based upon the measurements that commenter and their colleagues have conducted showing that infrasound and low frequency sounds in these lower ranges propagate too much greater distances than the audible sounds addressed by the ISO 9613-2 standards and the equivalent ANSI/ASA standard.	The ISO 9613-2 standard does not consider frequencies below 63 Hz. Therefore, evaluation of infrasound and the portion of the low frequency spectrum below 63 Hz will be conducted through a combination of drop-off with distance, and actual measurements at existing wind farms where these frequencies have already been tested.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.15	Richard R. James attachment: Commenter notes that any post construction noise evaluation should be conducted under the auspices of the towns who get to select the acousticians, the methodologies, and apply the results. Commenter claims that to allow the noise emitter to select its own procedures and acousticians is an open invitation for manipulation and bias. An effective compliance protocol must be provided in the application. Lighthouse Wind should include in this protocol, as is common in nearby Ontario, Canada, a procedure for establishing a fund for the two host towns to use independently to retain an acoustic engineering able to investigate noise complaints.	A post-construction noise protocol will be submitted as part of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A2.16	Richard R. James attachment: Commenter states that just as post construction noise testing should be handled by the towns to prevent bias and manipulation by the noise emitter when complaints are filed, the towns should be funded to allow them to handle complaints any necessary orders for mitigation. In towns where the utility operator has handle complaints, the complaints change from early concerned about noise and health effects to complaints that their complaints are not being addressed. Lighthouse Wind should provide the funding for the communities to have a formal complaint process, potentially including the hiring of a noise engineer with appropriate instruments to follow up on complaints. They should also be given the authority to issue mitigation orders should complaints be validated.	As per the Article 10 regulations, complaint handling procedures will provided as part of the Certificate Application.
101	Joerg, C. (Attorney for Niagara County)	101.2	The County also specifically calls to the attention of the Commission the position of NYSDOH, urging the Commission to consider "recommended noise guidelines for health protection such as those from the World Health Organization ['WHO']" (referencing WHO, Night noise guidelines for Europe, 2009).	Comment noted.
102	Behnke, H. (DPS)	102.40	Subsection 2.4.1 of the PSS proposes that "In order to quantify the existing sound conditions at the Project site, ambient sound levels will be measured at representative sites within the Project site." DPS Staff notes that as per 1001.19, Exhibit 19(c), ambient preconstruction baseline noise conditions shall be evaluated "at representative potentially impacted noise receptors".	As per 1001.19 Exhibit C, item (c), construction sound levels will be evaluated at potentially impacted noise receptors.
102	Behnke, H. (DPS)	102.41	DPS requests Lighthouse Wind submit the location of proposed ambient noise monitor stations.	Lighthouse Wind has provided a figure with the proposed locations of ambient noise monitor stations in Appendix F to this response document. This information will also be provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.42	DPS would like to know if Lighthouse Wind plans to measure pre-construction noise levels close to any proposed electrical substations in close proximity to any representative potentially impacted noise receptors.	One of the measurement locations will be on Lake Road (Route 18) in the general vicinity of the Somerset Power Plant and its electrical substation.
102	Behnke, H. (DPS)	102.43	DPS asks whether any ambient noise monitoring location(s) will be located in close proximity to, or will be influenced by, sounds from any railroad or roadway system, or any noise producing facility such as the Somerset Power Plant. If so, they request the following information: Distance(s) from the monitoring location(s) to the center line of the closest railroads or roadways, or to any noise-producing facility. CSX-owned railroads: Provide number of daytime and nighttime railroad operations, number of engines and cars per train and speed. Roadway system network: Provide AADT traffic information along with traffic composition (Trucks, medium trucks and automobiles) (daytime, nighttime) and posted speeds as available.	These data, to the extent publicly available, will be provided in the Certificate Application.
102	Behnke, H. (DPS)	102.44	Commenter notes that the Project site is described as having other land uses in Subsection 2.4.1, however, the section does not include a discussion or consideration of lakefront/lakeshore, residential, or seasonal recreational uses.	A complete discussion on the existing land use of the Project site will be provided in Exhibit 4 (Land Use) of the Certificate Application.

Lighthouse Wind Project Case No. 14-F-0485

Summary of Responses to PSS Comments

Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.45	<p>Referring to Subsection 2.4.2.2, the commenter (DPS) notes that the discussion of adverse impacts in the PSS does not provide a sufficiently detailed basis to support the statements. A thorough literature review of adverse impacts and health effects from noise including low frequency noise and infrasound should be included in the Application. DPS Staff notes that Exhibit 15 requires "A statement and evaluation that identifies, describes, and discusses all potential significant adverse impacts of the construction and operation of the facility, the interconnections, and related facilities on the environment, public health, and safety, at a level of detail that reflects the severity of the impacts and the reasonable likelihood of their occurrence, identifies the current applicable statutory and regulatory framework, and also addresses: ... (e) for wind power facilities, impacts due to blade throw, tower collapse, audible frequency noise, low-frequency noise, ice throw and shadow flicker." DPS Staff also notes that 16 NYCRR §1001.19 – Exhibit 19(e) requires: "an analysis of whether the facility will produce significant levels of low frequency noise or infrasound." Commenter also notes that the PSS does not propose a methodology, reference or guideline for the evaluation of health effects from noise including low frequency noise and infrasound for the Project. Commenter requests a list of methodologies, studies, references and/or guidelines that are proposed to be used for evaluation of health effects along with a brief summary and justification for selection. DPS-Staff recommends as a minimum, comparing the noise levels from the Project with the guidelines and recommendations from the World Health Organization:</p> <ul style="list-style-type: none"> <li>• World Health Organization. Night Noise Guidelines for Europe. 2009.</li> <li>• World Health Organization. Guidelines for Community Noise. 1999.</li> </ul>	<p>The Application will evaluate low frequency sound and infrasound from this Project. Relevant health effect studies and evaluation will be discussed in 1001.15 Exhibit 15 Public Health &amp; Safety. A few of these studies to be further referenced in the Application include, but are not limited to:</p> <p>(1) McCunney, Robert J., K. Mundt, W. D. Colby, R. Dobie, K. Kaliski, and M. Blais. "Wind Turbines and Health: A Critical Review of the Scientific Literature." Journal of Occupational and Environmental Medicine 56 (11), November 2014.</p> <p>(2) Wind Turbine Impact Study: Report of Independent Expert Panel. Prepared for: Massachusetts Department of Environmental Protection and Massachusetts Department of Public Health, January 2012.</p> <p>(3) Berger RG, Ashtiani P, Ollson CA, Whitfield Aslund M, McCallum LC, Leventhall G and Knopper LD (2015) Health-based audible noise guidelines account for infrasound and low-frequency noise produced by wind turbines. Front. Public Health 3:31. doi: 10.3389/fpubh.2015.00031</p>
102	Behnke, H. (DPS)	102.46	<p>Referring to Subsection 2.4.3 of the PSS, the commenter (DPS) requests that Lighthouse Wind include a copy of Town of Somerset Municipal Code and Town of Yates Zoning Regulations, as well as any other regulation, noise ordinance or code, related to noise and vibrations. Commenter also notes that although the use of the "worst case" turbine model proposed for the Project may provide an estimate of the maximum sound impacts, the scope should also include an evaluation of quieter wind turbine options and alternatives layouts with greater setbacks, as assessment of alternatives that may avoid or minimize noise impacts from the Project. DPS Staff notes that the intent of Article 10 regulations is avoiding or minimizing environmental impacts. In addition, 16 NYCRR §1001.19 – Exhibit 19 (j) requires an "identification and evaluation of reasonable noise abatement measures for the final design and operation of the facility including the use of alternative technologies, alternative designs and alternative facility arrangements."</p>	<p>We will work with the Towns of Somerset and Yates to obtain complete copies of any applicable codes, laws, or regulations.</p> <p>Application will include a worst case scenario which can only be avoided and/or mitigated by use of other turbine models and meet the Project sponsors stated goals.</p>
102	Behnke, H. (DPS)	102.47	<p>In reference to subsection 2.4.3 of the PSS, commenter requests that Lighthouse Wind specify the topics that are proposed to be analyzed under the NYSDEC noise policy (e.g., community complaint potential) and how it is planned to be applied to the Project including the noise descriptors that will be used for ambient and operational sounds, a summary of the procedure that will be followed for determination of change in noise levels along with a justification about whether the interpretation, noise descriptors and proposed procedures are also consistent with applicable methodologies to evaluate noise impacts. DPS Staff notes that the NYSDEC noise policy advises the following: "thresholds as indicators of impact potential should be viewed as guidelines subject to adjustment as appropriate for the specific circumstances one encounters." The NYSDEC policy also lists several examples of methodologies that may be used for noise analyses prepared for projects such as the Composite Noise rating (CNR), Community Noise Equivalent Level (CNEL) and Day-Night Noise Levels (Ldn). Commenter requests an explanations as to if any of these methodologies or any other is proposed for evaluation of community complaint potential for the Project, along with a justification for selection including a discussion about whether the proposed methodology was developed based upon data related to annoyance or complaints from wind turbine projects. DPS Staff recommends evaluation of community complaint potential based on a thorough review of literature specifically as related to wind turbine projects.</p>	<p>One of the NYS DEC community complaint methodologies will be evaluated in the Application. All complaint evaluation methodologies listed in the NYS DEC Guideline (CNR; CNEL; Ldn) were developed well before wind turbines were prevalent. Therefore, none of these are directly based on annoyance or complaints from wind turbines specifically. That being said, the Composite Noise Rating (CNR) method takes into account the existing background sound levels for determining an expected community reaction to future sound levels from a source such as wind turbines. Therefore, it would provide another tool to evaluate whether noise from the Project is expected to be an issue or not.</p>
102	Behnke, H. (DPS)	102.48	<p>Commenter (DPS) requests that Lighthouse Wind include a list of all applicable noise standards referenced in Subsection 2.4.3 of the PSS.</p>	<p>This information will be provided in the Application.</p>
102	Behnke, H. (DPS)	102.49	<p>Commenter (DPS) states that although identification of reasonable noise abatement measures is required by 16 NYCRR §1001.19 -Exhibit 19 for construction and post-construction phases, avoidance and mitigation measures should be also part of the design process. DPS Staff notes that 16 NYCRR §1001.19 -Exhibit 19(j) requires "An identification and evaluation of reasonable noise abatement measures for the final design and operation of the facility including the use of alternative technologies, alternative designs, and alternative facility arrangements" (emphasis added). DPS requests that Lighthouse Wind include in a Revised Scoping Statement that avoidance and mitigation measures will also be analyzed during the design phase.</p>	<p>Avoidance, minimization and mitigation of potential noise impacts will be evaluated in the Application.</p>

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Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.50	Commenter (DPS) states that the PSS should list all the organizations and the publication series that are considered by Lighthouse Wind to be "peer-reviewed" and that are proposed for evaluation of noise and vibration impacts from the Project. DPS also requests that Lighthouse Wind list any references specific to wind turbine noise impacts, including health impacts that are proposed to be used for the analysis of project impacts.	This information will be provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.51	Referring to subsection 2.4.3 of the PSS, the commenter (DPS) notes that the PSS should specify that the most recent aerial imagery information will be used. Commenter also states that this section of the PSS should propose the radius of evaluation of impacts on sound sensitive receptors within the study area.	The most recent publicly available aerial imagery will be used. Sound level analyses will be done for receptors up to one mile from any proposed wind turbine location.
102	Behnke, H. (DPS)	102.52	Commenter (DPS) requests that Lighthouse Wind indicate if they plan to locate any ambient monitoring station close to or under the influence of any existing noise sources as indicated in DPS Staff comments on PSS subsection 2.4.1. Commenter states that Lighthouse Wind should explain whether any preliminary sound data show that six locations will be sufficient for a characterization of the pre-construction ambient noise levels within the Project area and provide the expected accuracy and survey class associated to a six-location noise survey for this Project. DPS Staff notes that ANSI/ASA Standard S12.9-1992 (R 2013)/Part 2 has several recommendations to determine the number of sites that are required for achieving a specific spatial accuracy (Survey Class).	It is not necessary to measure at every location throughout the Project site. Rather the "deterministic spatial sampling" technique discussed in ANSI S12.9 Part 3 was used where sites were selected to be representative of the sound levels of the total area around the Project site. For example, sounds levels will be measured at a location within Golden Hill State Park to capture levels in that land use. Sound levels will be measured near a house on Somerset Drive to characterize sound levels at homes near the lakefront. Lighthouse Wind has provided a scope for conducting the noise impact assessment and a map with locations of sound monitors as Appendix F to this response document. Mitigation for noise impacts will be discussed in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.53	Commenter (DPS) recommends submitting a sound collection protocol for collection of pre-construction baseline noise levels within the Project area to be discussed during the scoping and stipulation phases. DPS Staff also recommends to prepare this protocol based upon the most relevant and applicable portions of the most recent versions of ANSI/ASA standards for measurement of sounds. Sound protocols should include requirements for sound instrumentation (type, sound floor, wind screen, etc.), calibration requirements, meter settings, locations to be tested along with a justification as for why selected locations are considered to be representative potentially impacted noise receptors, noise descriptors to be collected, range of sound frequencies, weather conditions to be tested, testing conditions to be excluded, proposed seasonal schedules and time frames, testing methodologies and procedures, provisions for evaluation of existing tones or sounds with strong low frequency noise content if any, as well as provisions for analysis of results, reporting, and documentation. DPS Staff recommends starting ambient noise collections after the specifics are discussed within the scoping and stipulations phases. Commenter requests that Lighthouse Wind explain whether any preliminary data show that a one-week survey per season will be sufficient for proper characterization of the ambient noise levels within the Project area and provide preliminary results, expected accuracy and survey class for a seven-day sampling period for this Project. DPS Staff notes that ANSI/ASA Standard S12.9-1992(R2013)/Part 2 has several recommendations to determine the number of days required to achieve a specific temporal accuracy (Survey Class).	Lighthouse Wind will prepare a sound level protocol and meet with DPS staff to review.
102	Behnke, H. (DPS)	102.54	Commenter (DPS) states that the PSS should include a protocol for collection of weather information. The protocol should include the location of weather stations, specification of the instrumentation to be used along with the parameters to be measured (e.g. temperature, relative humidity, wind speed, direction, precipitation, barometric pressure, cloud coverage, wind shear, etc.) and the accuracy or precision for acceptable instrumentation, as well as provisions for analysis of results, reporting and documentation.	Lighthouse Wind will prepare a sound level protocol and meet with DPS staff to review.
102	Behnke, H. (DPS)	102.55	In reference to subsection 2.4.3 of the PSS, the commenter (DPS) states that Lighthouse Wind should include a brief description of the computer model that is proposed to be used for evaluation of construction noise impacts along with the outdoor propagation standard that will be selected. Commenter notes that the PSS should also list any methodology that will be used for assessing construction noise impacts. DPS Staff recommends as a minimum following the recommendations of the FHWA Highway Construction Noise Handbook. FHWA-HEP-06-015 that are applicable to the Project. Although developed mainly for roadway projects, the handbook is applicable to many construction projects. The Handbook provides guidance in measuring, predicting, and mitigating construction noise and developing noise criteria. The Handbook also reflects substantial improvements and changes in the way highway construction noise has been addressed since the 1977 FHWA Special Report. Commenter notes that the PSS should specify whether selected noise emissions will also be used as criteria for selection or rejection of construction equipment during the construction phase. Commenter requests Lighthouse Wind report if construction noise surveys will be included as part of the scope for monitoring construction noise levels or in response to any construction noise related complaints.	This information will be provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.56	In reference to subsection 2.4.3 of the PSS, commenter (DPS) requests that Lighthouse Wind include a separate discussion related to the specifics for modeling noise impacts from operation of the Project.	Construction noise and operational noise inputs will be discussed separately in Exhibit 19 of the Certificate Application.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.57	Commenter (DPS) requests that Lighthouse Wind specify the information that it is typically reported by potential manufacturers including noise descriptors and a range of frequencies evaluated. Also specify how the information for frequencies ranges not tested by manufacturers but that it will be needed for evaluation of noise impacts (including low frequency noise and infrasound) will be obtained. Specify whether Lighthouse Wind will be using or collecting information from other projects with the same turbine models as proposed, and the sound protocols that are or will be followed for those collections.	This information will be provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.58	Commenter (DPS) seeks clarification as to if acoustical information (such as sound power or sound pressure levels, tones, etc.) from the wind turbines are or will be determined by potential manufacturers or Lighthouse Wind by following IEC 61400-11 2012 Part 11, "Acoustic Noise Measurement Techniques," or any other applicable standard(s).	Sound power level data for the wind turbines will be provided by the manufacturer in accordance with the ISO 61400-11 testing protocol.
102	Behnke, H. (DPS)	102.59	Commenter (DPS) notes that the PSS should briefly describe the specifications of the computer model that is proposed to be used for evaluation of operational noise impacts including range of frequencies that will be evaluated and whether the model calculations will be performed in full octave or fractional octave bands, the outdoor propagation standards that will be selected (e.g. ISO 9613, CONCAWE, etc.), the ground absorption values that are intended to be used, and the meteorological conditions that will be modeled. Please also describe a methodology for evaluation of infrasound and low frequency sounds for frequencies lower than the lowest frequency evaluated by the proposed computer model for this Project. Provide a brief discussion about the advantages or disadvantages of the use of proposed models and outdoor propagation methodologies and assumptions as compared to other alternatives.	The Cadna/A software implementing ISO 9613-2 will be used to conduct the sound level modeling. This handles full octave band frequencies from 31.5 Hertz to 8,000 Hz. Ground absorption factor (G) of 0.5, a temperature of 10 degrees C, relative humidity of 70%, and wind from all directions (unidirectional) will be used. Infrasound and low frequency data (if available) will be calculated using a combination of spreadsheet drop-off with distance, and/or experience at other existing wind turbines. Additional detail and discussion will be provided in the Application.
102	Behnke, H. (DPS)	102.60	Commenter (DPS) notes that Lighthouse Wind should specify how the meteorological corrections will be calculated (e.g., ISO 9613, CONCAWE, etc.). Provide a brief discussion about the advantages or disadvantages of the use of the proposed methodologies as compared to other alternatives.	The meteorological correction factor in ISO 9613-2 (Cmet) will be set to zero which is conservative. More detail will be provided in the Application.
102	Behnke, H. (DPS)	102.61	Commenter (DPS) notes that Lighthouse Wind should provide a general discussion about the accuracy of proposed models and methodologies and the correlation between measurements and predictions for documented cases as compared to other alternatives, if available.	Numerous post-construction sound level measurement programs have demonstrated that the worst-case predictions arising out of ISO 9613-2, assuming proper inputs, are equal to or less than pre-construction modeled sound levels. More detailed information will be provided in the Application.
102	Behnke, H. (DPS)	102.62	Commenter (DPS) would like an explanation as to how many combinations of scenarios (operational and meteorological conditions such as wind speed, wind magnitude and atmospheric stability) are proposed to be modeled for the Project. DPS Staff notes that 16 NYCRR §1001.19 -Exhibit 19 requires worst case (L10) and typical (L50) operational noise levels either for a year, summer, winter, daytime or nighttime. Please describe how many operational noise scenarios and how many different meteorological conditions will be modeled so that the operational noise levels as required by 16 NYCRR §1001.19 - Exhibit 19 and by local regulations can be properly calculated.	Meteorological conditions representative of both summer and winter, daytime and nighttime, will be modeled, and included in Exhibit 19 of the Certificate Application. These will include looking at both "typical" and worst-case sound levels from the wind turbines.
102	Behnke, H. (DPS)	102.63	Commenter (DPS) would like Lighthouse Wind to specify whether ambient and operational sound data when the turbines will not be operational will be excluded from the calculations, when reporting the levels required by 16 NYCRR §1001.19 - Exhibit 19(f). DPS Staff recommend reporting both results, including and excluding the periods when the turbines will not be operational.	Both sets of data will be reported--every hour no matter what the wind speed, and then only the hours when the wind turbines would have been operational.
102	Behnke, H. (DPS)	102.64	Commenter (DPS) would like Lighthouse Wind to specify the extent of the information that will be provided to comply with the requirements from Exhibit 19(f) for reporting the sound levels determined with the computer noise model at representative external property boundary lines of the facility, related facilities and ancillary equipment sites and at the representative nearest and average noise receptors, and any other requirements any local code may have. Also specify how preconstruction ambient noise levels at boundary lines that will not be measured during the sound surveys will be estimated.	This information will be provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.65	Commenter (DPS) requests that Lighthouse Wind specify the lowest frequency that will be evaluated for infrasound and whether ambient noise collections will also be conducted starting at the lowest identified infrasound frequencies.	Most of the ambient sound meters are equipped to measure down to 6.3 Hz. We have two sound meters that are fitted with special infrasound microphones that are capable of measuring down to 1 Hz. Both meters will be used for this Project. Every effort will be made to evaluate the Project down to 1 Hz.
102	Behnke, H. (DPS)	102.66	Commenter (DPS) requests that Lighthouse Wind describe reference thresholds that will be used for assessment of audibility of sounds along with the approximate percentage of people that may hear noise levels lower than those described by referenced thresholds.	Audibility is not a criterion for a wind farm or any other source of sound in NY State. There are "thresholds of hearing" for each frequency based on ISO 226 ("Acoustics – Normal equal-loudness-level contours", International Standard ISO 226:2003). However, the existing background in the community is already above these "audibility" levels without the wind farm. Therefore, an assessment of audibility from the wind turbines is not proposed to be included in the sound study for this Project.
102	Behnke, H. (DPS)	102.67	Commenter (DPS) asks Lighthouse Wind to indicate if the population that is expected to be exposed to sound levels lower or higher than any identified threshold values will be reported in the application (percentages and absolute values).	This information will be provided in Exhibit 19 of the Certificate Application.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.68	Commenter (DPS) would like Lighthouse Wind to indicate if infrasound and low frequency noise levels from the Project will also be compared to non-auditory perception thresholds, such as body vibration thresholds, at potentially impacted noise or vibration sensitive locations.	Yes, this comparison will be performed as part of the sound study and provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.69	Commenter (DPS) recommends performing a baseline vibration survey at potentially impacted and representative sensitive receptors.	A baseline vibration survey will be done at representative sensitive receptors if any pile driving work is required during construction.
102	Behnke, H. (DPS)	102.70	Commenter (DPS) states that the PSS should include a methodology for determination of tonality or prominent tones from the wind turbines and substation tonal noise sources. DPS Staff notes that Annex A from ANSI Standard S1.13-2005 has different methods for identification and evaluation of prominent tones. Additionally, Annex C from ANSI Standard S12.9-2005/Part 4 has a simplified method for evaluation of sounds with tonal content that could be applied under some specific circumstances. In addition, the Town of Yates "Wind Energy Facility Law" has a requirement to reduce the standards, in the event audible noise due to WECS operations contains a steady pure tone which is defined in the same section (Town of Yates District Regulations, Article V, §591.13.B). Please specify definitions of tonality for the purposes of evaluation of tones under the requirements of 16 NYCRR §1001.19, Exhibit 19, and Local noise codes.	The determination of whether a "tone" is created by the wind turbines will be conducted through the procedures in ANSI S12.9-2005/Part 4, Annex C.
102	Behnke, H. (DPS)	102.71	Commenter (DPS) would like Lighthouse Wind to specify a methodology to evaluate impulsive sounds from the operation of the wind turbines.	There is no requirement to analyze impulsive sound in the Article 10 regulations, nor is there an approved methodology to do this. However, the Certificate Application will discuss the potential for impulsive noise from the Project.
102	Behnke, H. (DPS)	102.72	Commenter (DPS) would like Lighthouse Wind to specify a methodology(ies) for assessment of airborne induced vibrations on adjacent buildings due to the operation of the turbines. DPS Staff recommends as a minimum using Hubbard's Methodology to evaluate the potential vibrational impacts from low frequency sounds on receptors, especially the possibility of generating vibrations or rattles in windows, walls or floors. Lighthouse Wind should provide a brief discussion about how its findings from other projects match with the predictions from Hubbard methodology or any other applicable methodology proposed for this Project.	It is not clear exactly what the "Hubbard Methodology" is in this comment. There are several papers authored by Harvey Hubbard related to low frequency noise from wind turbines. Many of his points and data from the 1991 JASA article are specifically referenced in the O'Neal et al Noise Control Engineering Journal paper (March-April 2011) which has updated criteria for evaluating vibration and rattle in houses. The O'Neal et al methods, which include Harvey data, are proposed for this Project.
102	Behnke, H. (DPS)	102.73	Commenter (DPS) states that the PSS should specify any standards that are proposed for evaluation of amplitude modulation.	There are currently no standards for evaluating amplitude modulation.
102	Behnke, H. (DPS)	102.74	Commenter (DPS) states that the PSS should specify how wind shear and turbulence will be evaluated.	To the extent local wind shear and turbulence data are available from an on-site meteorological tower they will be discussed in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.75	Commenter (DPS) notes that for illustrative purposes, Lighthouse Wind should include general examples of mitigation measures that can be applied to minimize environmental noise impact from wind turbines.	This information will be provided in Exhibit 19 of the Certificate Application.
102	Behnke, H. (DPS)	102.76	Commenter (DPS) notes that the PSS should propose methodologies for evaluation of sleep disruptions from the Project.	The WHO guideline of 45 dBA or less outside a house will be used to guide the discussion on sleep disturbance in the Certificate Application.
102	Behnke, H. (DPS)	102.77	Referencing 16 NYCRR §1001.19, Exhibit 19(h), requires a "tabular comparison of ... noise design goals for the facility." Commenter (DPS) requests that Lighthouse Wind provide a list of all proposed goals for the Project.	This information will be provided in Exhibit 19 of the Certificate Application.
103	Edick, R (NYSDEC)	103.6	Commenter (NYSDEC) recommends that sound pressure level analysis studies be consistent with the DEC's "Assessing and Mitigating Noise Impacts found at: <a href="http://www.dec.ny.gov/docs/permits_ej_operations/pdf/noise2000.pdf">http://www.dec.ny.gov/docs/permits_ej_operations/pdf/noise2000.pdf</a> . The studies are encouraged to sample multiple locations for ambient levels with a detailed discussion/rationale for their choice of placement of monitors and any factors that may cause a given location to be influenced towards a less conservative ambient level. Photographs of the monitoring locations should be provided with multiple vantage points as well as the times of day the sampling was performed. Care should be taken to explain the choice of minimum measurement periods. It is important that Lighthouse Wind explain the choice of locations with care to show that the results could not be unduly biased towards higher readings by non-representative events. Providing the L90 (the sound pressure level which is exceeded 90% of the time) in addition to the Leq is useful for providing a more thorough assessment of background levels. By providing the L90 (for both background and the post-construction estimate), a better grasp on the effect on the local residents can be obtained. Given the rural nature and low relative background levels, sleep may be disturbed at lower noise levels than in an urban/suburban environment. Commenter notes that one point in the DEC noise policy requires clarification - "For estimation purposes a seemingly serene setting such as rural farmland will be at the lower end of the scale at about 45 dB A." It should be noted that this was written with day time noise levels in mind - and that lower night time noise levels are likely to exist - by 5 to 10 dB A.	This information will be provided in Exhibit 19 of the Certificate Application.

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107	Orr, C.	107.2	Commenter notes that Dr. Ollson wrote in 2011 about the importance of baseline noise and infrasound monitoring and assessing the effects of wind turbines on human health, emotional and physical. Dr. Ollson and Dr. Knopper said, "it would be imperative to ensure robust study design prior to study initiation, which then would include acoustical engineers, health scientists, epidemiologists, social scientists ,and public health physicians..." Commenter then notes that Dr. Ollson was present at a Niagara County Board of Health meeting on Lighthouse Wind's behalf and under their payroll, and stated "if people are concerned (about their health) they should see their local physician."	An acoustical consulting firm has been retained for this Project. The results of the NIA study will be provided in the Certificate Application.
107	Orr, C.	107.3	Commenter previously lived near the Invenergy Wind Farm in Orangeville, New York and states that it is "very difficult to live, concentrate, sleep or otherwise relax in your home when there is a continuous pulsating drone and WUMP, WUMP, WUMP..."She notes that the sound varies based on weather conditions. She also states there is another kind of noise, described as a high pitched whine similar to the sounds of a jet engine, calling it excessive and continuous. Commenter notes that night-time noise sounds louder when ambient noise of the countryside is less, and notes that vibration from infrasound which permeates the house can be felt as well as heard.	The results of the NIA will be provided in Exhibit 19 of the Certificate Application.
107	Orr, C.	107.4	Commenter notes that even on calm nights at ground level, wind turbines are still frequently operating, and no masking effects from the noise of wind generated turbines. Commenter cites Erik Rudolphi and attaches the first page of the referenced paper.	This is a common misconception. Wind turbines may operate when the ground level winds are light but not calm. This is possible under strong wind shear conditions which may occur under a temperature inversion condition. The sound modeling will assume a moderate temperature inversion is present when calculating expected wind turbine sound levels from the Project.
107	Orr, C.	107.5	Commenter references the World Health Organization's 2009 study to refute that "noise, vibration and shadow flicker... pose no health threat" and "annoyance is not a health threat" as stated by Christopher Ollson at the Niagara County Board of Health meeting on 12/3/2015. She references the executive summary of the 2009 study: <ul style="list-style-type: none"> <li>• Sleep is a biological necessity and disturbed sleep is associated with a number of adverse impacts on health</li> <li>• There is sufficient evidence for biological effects of noise during sleep: increase in heart rate, arousals, sleep stage changes nod awakening.</li> <li>• There is sufficient evidence that night noise exposure causes self-reported sleep disturbance, increases in medicine use, increase in body movements, and (environmental) insomnia.</li> <li>• While noise induced sleep disturbance is viewed as a health problem in itself (environmental insomnia) it also leads to further consequences for health and well-being.</li> <li>• There is limited evidence that disturbed sleep causes fatigue, accidents and reduced performance.</li> <li>• There is limited evidence that noise at night causes hormone level changes and clinical conditions such as cardiovascular illness, depression and other mental illness. It should be stressed that plausible biological model is available with sufficient evidence for the elements of the causal claim</li> </ul>	The expected sound levels from the Project will be compared to WHO sleep disturbance guidelines.
107	Orr, C.	107.6	Commenter states WHO's concerns about long-term effects such as cardiovascular disorders should be evaluated in light of the acoustic situation over a long time period such as annual average of night noise level, while instantaneous effects such as EFG -or awakening reactions are better evaluated in light of the maximum noise level per event, such as the passage of a lorry, airplane, or train. It is wrong for Lighthouse Wind to claim, according to evidence presented by the World Health Organization, based on scientific evidence to the contrary, that no nighttime noise of industrial wind turbines will cause adverse health effects result from short term sleep disturbance caused by unusual short term noise significantly exceeding the ambient base-line level.	The expected sound levels from the Project will be compared to WHO sleep disturbance guidelines.
107	Orr, C.	107.7	The commenter states that Eja Pedersen, the author of- Human response to wind turbine noise (2007) publication was used, misleadingly to assert Lighthouse Wind's premise "that annoyance occurs for nonacoustical reasons." Pedersen never stated that in his report. Pedersen's publications are based on his dissertation which found that annoyance could be increased by Visual Prominence. However this was a secondary cause. The Primary cause of Annoyance is acoustical." Wind Turbine Noise is easily perceived and is annoying even at low A-weighted SPL's. [Sound Pressure Levels]. This could be due to the perceived incongruence between the characteristics of wind turbine noise and the background."	In the Pedersen paper, some people were annoyed no matter what the sound levels were prompting the conclusion that other characteristics, such as visual, may cause people to be annoyed from a source of sound.
107	Orr, C.	107.8	Commenter states that proper siting for massive wind complexes should only be in sparsely populated desert areas and that the PSS should be dismissed.	Comment noted.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
111	Jarvis, C.	111.12	In regards to PSS Section 2.4.1, commenter expresses that Lighthouse Wind has assumed that Somerset Operating Plant and its appurtenances will still be there for them to use for the next 25 years, and asks if the density of single family residences a factor in determining location of a Utility Scale Wind Project.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. The commenter misinterprets the information presented in the PSS Section 2.4.1. Lighthouse Wind presented existing conditions, including the existing Somerset Operating Plant, to provide context for the noise sources in the existing setting. Lighthouse Wind makes no assumptions as to the status of the Somerset Operating Plant in the future. As for the density of single family residences, as stated in Section 2.15.1 of the PSS, residential development is one of the factors considered in the selection of a site for an economically viable wind energy project.
111	Jarvis, C.	111.13	In regards to PSS Section 2.4.2.2, commenter asks why when discussing wind turbine sound, is the Study Area compared to the noise level of a suburban neighborhood when it is initially described as a largely rural area?	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. PSS Section 2.4.1 compared the developed areas along the Lake Ontario shoreline to moderately developed, suburban areas with additions of an occasional passing boat or personal watercraft, waves along the shoreline, and increased impacts from wind from the lake. Lighthouse Wind also states that sound levels along the developed shoreline are expected to be elevated seasonally as vacationers and seasonal residents occupy some properties that are vacant in the winter. Based on the seasonal recreational and residential nature of the areas directly along the shoreline (such as those areas north of Lakeshore Road), Lighthouse Wind feels this is an accurate description of the area. Lighthouse Wind recognizes that there are other representative areas throughout the Study Area, such as agricultural areas, forested areas, and major travel corridors and concentrated human activity in the Hamlets of Olcott and Newfane and Villages of Barker and Lyndonville. Lighthouse Wind has provided the full Sound Study Scope as Appendix F of this response document.
111	Jarvis, C.	111.14	In regards to PSS Section 2.4.3, Commenter believes the subjective effects of noise are important, such as how a person feels and thinks about their environment. Commenter believes the noise studies completed don't take everything into account. Commenter notes that Somerset Operating Plant had to purchase homes of people who were distressed by plant noise.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Comment noted. Lighthouse Wind has provided the full Sound Study Scope as Appendix F of this response document.
111	Jarvis, C.	111.15	In regards to PSS Section 2.4.3, Commenter asks why Lighthouse Wind is using local laws, codes and regulations that were meant for small scale wind turbines and not utility scale wind turbines.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. The Commenter misinterprets the existing local laws, codes and regulations. The existing local laws for both the Town of Somerset and Town of Yates were enacted for commercial wind-energy systems.
DMM17	Basaran, C.	DMM17.1	Commenter is opposed to the Project due to its location and size of the turbines. Commenter is a Professor of Civil, Structural and Environmental Engineering at University at Buffalo, SUNY and has studied the fundamentals behind wind power generation and visited similar size wind power farms around the US. Commenter states that Low frequency noise near these turbines is unbearable, and references an abstract from Journal of Acoustic. Society of America. 129 (6), June 2011 (Low-frequency noise from large wind turbines, by Henrik Mollera and Christian Sejer Pederson). Commenter concludes turbines should be built either far away from the shore line in the middle of the Lake or much smaller size so that the noise will not destroy our community and property values.	Comment noted.
DMM28	Pitcher, M.	DMM28.2	Commenter expresses there is an impact on human health factors that should be considered and states turbines should not be built near residential homes. Commenter states very rural areas with minimal residences and wide open land or water with little wildlife is the optimal place. Commenter notes that turbines generate a noise disturbance, which is more obvious at night when people are trying to sleep. Commenter includes experiences by other residents (Shineldecker) near turbines, who had symptoms including ear pressure, severe headaches, irritability, sleep disturbance, memory loss, fatigue and depression immediately after the turbines began operating, claiming they have resorted to sleeping in the basement to try to escape the noise disturbance that the turbines generate. Commenter also states that if the home owner within the range of any noise disturbance does not sign a contract agreeing to the construction of the turbine it should not be allowed.	In addition to the studies already committed to in the PSS, Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. However, Lighthouse Wind believes that the work recently published by Health Canada and specifically by Dr. David Michaud, "Michaud et al., 2016. Effects of Wind Turbine Noise on Self-Reported and Objective Measures of Sleep. Sleep, Vol. 39, No. 1" stated, "sleep disturbance reported as a result of transportation noise exposure occurs at sound pressure levels that exceed WTN [wind turbine noise] levels calculated in the current study. Study results concur with those of Bakker et al. (2002), with outdoor WTN levels up to 54 dB(A), wherein it was concluded that there was no association between the levels of WTN and sleep disturbance when noise annoyance was taken into account". Therefore, Lighthouse Wind believes that the proposed Project will be properly sited using the results of this study as a guideline.
DMM28	Pitcher, M.	DMM28.3	Commenter notes researchers visit impacted areas during the day and claim that there is no substantial noise disturbance. Commenter states this is because Environmental sounds are quieter in the evening, lowering the background sound levels, and wind speeds tend to be higher at blade height during nighttime hours, which increases sound emissions. Further, nighttime weather conditions enhance sound propagation. The result is that at night wind turbines can be a significantly more noticeable noise source than during the daytime.	The sound levels study will examine potential impacts during both daytime and the quietest nighttime periods.
DMM80	Doughty, K.	DMM80.2	Commenter states that proposed Project's contributions to alternative energy do not justify the Project's proximity to Yates residents, risking infrasound health implications.	Lighthouse Wind is committed to including comprehensive international research on wind turbines and health effects in the Certificate Application. This will include the type of information being requested on infrasound. Lighthouse Wind does not believe that the published research supports a link between adverse health impacts and infrasound levels at residents' homes.

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Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

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DMM136	Schwabel, Pa.	DMM136.2	The commenter would like the Board to consider: General Electric, a major manufacturer of turbines, stated the following in 2014: For the stillest, most rural areas ... the background noise is 30 decibels. At that level, a turbine located about a mile away wouldn't be heard. From GE Reports: <a href="http://www.gereports.com/how-loud-is-a-wind-turbine">http://www.gereports.com/how-loud-is-a-wind-turbine</a>	The actual background sound levels in the Project site will be measured as part of this Project. The results will be provided in the NIA and Exhibit 19 of the Certificate Application.
<b>Cultural Resources (PSS Section 2.5/Application Exhibit 20)</b>				
37	Crafts, C.	37.3	Commenter notes that the Project will destroy a local State Park, taking its name, while not even acknowledging its historical value.	Lighthouse Wind will prepare a Phase I archaeological survey to identify and assess potential impacts to cultural resources, including resources identified through historical research, coordination with the SHPO, and public comments.
45	Stockman, G.	45.1	Commenter finds the discussion regarding Cultural Resources sites to be vague, lacking in specific references to historic sites and without a clear description of the process that will be used to preserve buildings and sites in the area. Without specificity in the plan regarding location of the turbines, it is impossible to comment with any accuracy as to the physical damage that may be caused to historic buildings and properties by the construction of up to 70 industrial wind turbines.	A more detailed review of potential impacts to cultural resources will be included in Exhibit 20 of the Certificate Application, for which there will be another opportunity for public comments. The Certificate Application will include a Visual Impact Assessment (VIA) to allow stakeholders to see a visual representation of the proposed Project.
45	Stockman, G.	45.2	Commenter notes it is difficult to follow the criteria to be used beyond the identification of cultural resources to determine historical significance and archeological significance of properties within the study area of this Project and to understand how you will carry out your intention evaluate and "to mitigate potential impacts to historic resources."	Exhibit 20 of the Certificate Application will include more detailed information regarding the process for evaluating and mitigating potential impacts to cultural resources. The full Cultural Resource Study scope is included as Appendix H in this response document.
45	Stockman, G.	45.3	Commenter notes it is especially discouraging that according to the CRIS, frequently cited in your preliminary plan, a listed building that did not appear among those mentioned in the section under Cultural Resources 2.5.1 is the very lighthouse for which you have named your project.	Lighthouse Wind will prepare a Phase I archaeological survey to identify and assess potential impacts to cultural resources, including resources identified through historical research, coordination with the SHPO, and public comments. Lighthouse Wind is aware that the Thirty-Mile Point Lighthouse is listed in the state and federal registers and will include this resource in its review. Appendix I to this response document is an updated list of significant resources which will be updated upon further consultation with SHPO and local representatives.
45	Stockman, G.	45.4	Commenter notes that in Section 2.5.2.2.2 of PSS, Lighthouse Wind states that visual and noise impacts will be evaluated but that it is unclear what is intended by the term evaluation. Commenter believes the PSS should state the impact to the area's historic features as an honest estimation of loss of a given building's usefulness as a dwelling, as a site of interest to visitors or for use as an example of the history of the area, such as the fragile cobblestone houses that are scattered throughout the area and are representative of the area's distinct historical building style.	The evaluation of potential noise and visual impacts to these resources will be conducted in accordance with the Article 10 regulations for Noise and Vibration, and Visual Impacts and presented in Exhibit 19 (Noise and Vibration) and Exhibit 24 (Visual Impacts) of the Certificate Application. The full Visual Impact Assessment and Cultural Resources Study scopes are included as Appendices G and H in this response document.
45	Stockman, G.	45.7	Commenter notes there are a number of historic buildings and archeological sites not listed in the PSS. A full review of these structures and related cultural resources will demonstrate that even in rural areas such as Somerset and Yates, there is much that is threatened.	Lighthouse Wind will prepare a Phase I archaeological survey to identify and assess potential impacts to cultural resources, including resources identified through historical research, coordination with the SHPO, and public comments. The full Cultural Resource Study scope is included as Appendix H in this response document.
95	Vacco, D. (Town of Somerset)	95.31	Commenter (Town of Somerset) believes that the PSS fails to properly scope the Phase 1A or 1B Field Testing Plan as required by 16 NYCRR § 1000.20 because they rely on potentially inapplicable source material: archaeological work describing environmental zones in the Upper Susquehanna Valley, over 100 miles from the Project Site. Commenter states that if no zones apply, then it is presumed the number of applicable shovel tests would be zero, thus obviating the need for study. The Town demands a full Phase II study including intensive archaeological field investigations in accordance with 16 NYCRR § 1000.20(a)(4). The Town believes there is the potential for damage to known and unknown archaeological sites related to Native American settlements, the War of 1812, and the construction of the historic 30 Mile Point Lighthouse.	SHPO requires that Phase I surveys to identify environmental zones within the APE following the methods in Chapter 5 of Robert E. Funk's 1993 work, Archaeological Investigations in the Upper Susquehanna Valley, New York State. This requirement applies to all Phase I surveys conducted in the New York State. Exhibit 20 (Cultural Resources), of the Certificate Application will provide cultural surveys conducted to date. Where warranted based upon Phase I surveys, and through coordination with the SHPO, Lighthouse Wind will conduct Phase II studies or otherwise avoid, minimize or mitigate potential impacts to cultural resources. Lighthouse Wind has provided a full scope of Cultural Resources Studies as Appendix H to this response document.
95	Vacco, D. (Town of Somerset)	95.32	Commenter (Town of Somerset) notes that an additional cultural resource not addressed by the PSS is the Great Lakes Seaway Trail. Commenter mentions this route is a federally designated National Scenic Byway. On February 11, 2015, the CEO of the Great Lakes Seaway Trail sent a letter to the Siting Board. The letter incorporated with the commenter's response. Commenter notes that the Seaway trail issue should be addressed as a cultural resource, as well as in any other portion of the PSS where it is appropriate to raise the issue.	The Great Lakes Seaway Trail was designated as a National Scenic Byway for its intrinsic historic significance and was described in the PSS in Section 2.9. As required by Article 10 regulations, the scenic byway will be indicated on maps included in the Certificate Application and will be included in the view shed analysis in Exhibit 24 (Visual Impacts).
95	Vacco, D. (Town of Somerset)	95.E9.18	Commenter (Town of Somerset) notes that Lighthouse Wind must identify all homes and structures (including barns) that are greater than 50 years old. Included in this work should be the identification of all structures eligible for inclusion on the State Register and any locally significant sites/ structures.	SHPO requires that Phase I surveys identify structures within the defined Area of Potential Effect that are greater than 50 years old and to complete a Building/Structure Inventory form. This will be completed during Phase I surveys.
95	Vacco, D. (Town of Somerset)	95.E12.1	Commenter (Town of Somerset) references a Great Lakes Seaway Trail letter dated 2/11/2015 which states Route 18 through most of Orleans and Niagara County is designated route of the Great Lakes Seaway Trail, a federally designated National Scenic Byway. The letter discusses concern over view scape and agricultural nature of the trail, threat to bird populations, and vitality and livability of the communities along the trail. Letter seeks to ensure that the natural and scenic resources of the area are carefully addressed.	The Great Lakes Seaway Trail was designated as a National Scenic Byway for its intrinsic historic significance and was described in the PSS in Section 2.9. Impacts to agriculture and the National Scenic Byway viewshed will be further addressed in the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.78	The commenter (DPS) notes that the discussion of cultural resources in the vicinity of the Project, which focusses on properties primarily located well outside of the actual proposed Project Area, represents an oversight of resources within or immediately adjoining the proposed Project Area, including at least eight listed or previously determined eligible for listing on the National Register of Historic Places (NRHP) within the Towns Yates and Somerset, including the NRHP-listed 30-Mile Lighthouse located within Golden Hill State Park, directly adjacent to areas mapped as the Project Area in the PSS.	Lighthouse Wind will evaluate these sites and coordinate with SHPO to identify listed or eligible properties for the NRHP. An updated list of NRHP Listed and Eligible Properties is included as Appendix J of this response document which will be updated upon further consultation with SHPO. A more detailed discussion of cultural resources will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.79	Commenter notes that the term "Historic Sites" as used in subsections 2.5.2.1.2 and 2.5.2.2.2 of the PSS should generally not be used to refer to properties other than designated New York State Historic Sites, which are a category of properties owned and managed for public accessibility and enjoyment by the NYS Office of Parks, Recreation and Historic Preservation. The NYS Historic Site closest to the proposed Project Area is Old Fort Niagara located in the Town of Porter at the Niagara River confluence with Lake Ontario, over 20 miles west of the Project Area.	The use of the term 'historic places' in the PSS reflects its usage in the Article 10 regulations and refers to sites listed or eligible for the State or National Register of Historic Places. The Phase 1 surveys and discussion in the Certificate Application will provide more detail on the nature of each identified resource.
102	Behnke, H. (DPS)	102.80	The commenter (DPS) notes that the "Niagara Historic Trail" touring route in the Project Area is not identified in the PSS as a cultural or visual resource. A map of this designated resource is attached with their comments.	Lighthouse Wind will evaluate potential cultural and visual impacts to the Niagara Historic Trail in the Certificate Application.
<b>Geology, Seismology, and Soils (PSS Section 2.6/Application Exhibit 21)</b>				
49	Wolanyk, E.	49.14	Commenter notes that topsoil mixing with subsoil and soil compaction are not temporary impacts. Commenter requests that Lighthouse Wind develop methodologies that specify how the topsoil mixing with sub soil should be mitigated and how soil compaction is to be mitigated other than using a soil ripper down to a depth of 18 inches. Commenter also asks what guarantees does the community have that any practices identified will actually be implemented and what repercussion would there be if they are not completed to the satisfaction of the land owner?	Lighthouse Wind, as stated in the PSS, will adhere to the Restoration Requirements section of the NYS&M "Guidelines for Agricultural Mitigation for Wind Power Projects" and Stormwater Pollution Prevention Plan to be developed for the Project. Lighthouse Wind also intends to have a qualified environmental monitor(s) present during all construction and restoration activities resulting in ground/vegetation disturbance.
49	Wolanyk, E.	49.35	Commenter believes the data on the seismology of the area to be out-of-date. Commenter states that four small earthquakes have occurred in the past two years with the epicenter of two within the Town of Somerset and the third just south of it. The latest occurred on December 18, 2015 in the middle of Lake Ontario. Commenter notes that Dr. Robert Jacoby, a geology professor at The University of Buffalo has stated that a 6.5 earth quake could occur in Western New York. Commenter notes that a 1988 quake in Quebec registered 5.9 on the Richter scale and that same fault line reportedly runs close to the proposed area. Commenter believes Lighthouse Wind should contact Dr. Robert Jacoby to identify fault lines and identify recent predictions of a significant earthquake in the not too distant future. Commenter includes map of NY Fault Lines	The Certificate Application will include an evaluation of seismic vulnerability based on regional and landscape-scale information obtained from public sources as well as submit engineering data about the specific wind turbine type to the Public Service Commission.
56	Bronson, C.	56.1	Commenter asks a series of questions regarding geology/seismic activity as follows: Are Lighthouse Wind's proposed wind turbine towers for Lighthouse Wind prepared for any seismic activity? How can any testing be measured if the exact height and dimensions of the turbine towers are not disclosed at this time? Has Lighthouse Wind considered the use of base isolators? What kind of soil testing, analysis of soils and substrate has been done to determine the best construction practices on which to erect 600' wind turbines? In performing tests will Lighthouse Wind be using the Simple Model or the Full Model for estimating seismic loading? What kind of simulating computer software will Lighthouse Wind utilize to perform seismic load testing? Has a 600-foot wind turbine been tested for seismic loading anywhere? What kind of seismic activity might the tower withstand with respect to the geology of Niagara and Orleans Counties? Commenter would like Lighthouse Wind to provide the information with regard to all seismic testing of turbines that Lighthouse Wind intends to use for the Project.	The Certificate Application will include an evaluation of seismic vulnerability based on turbine specifications, regional and landscape-scale information available from public sources, and site-specific geology and soil information obtained from a preliminary geotechnical investigation. Consideration of base isolators and seismic loading testing are outside of Article 10 regulations for inclusion in the Certificate Application, but may be considered during final design if appropriate and applicable to the Project.
95	Vacco, D. (Town of Somerset)	95.33	Commenter (Town of Somerset) notes that certain footings and their methods of construction (which Town believes Lighthouse Wind hasn't properly scoped), could cause lasting damage to soils in Somerset. If turbines are to be uniquely large, additional study should be conducted to determine their suitability for siting on land, particularly in Yates and Somerset given their soil and bedrock composition. Larger towers may well pose unique stabilization issues, and could be susceptible to higher rates of catastrophic collapse.	The Certificate Application will include an evaluation of suitable foundations based on site-specific information obtained from a preliminary geotechnical investigation.
95	Vacco, D. (Town of Somerset)	95.34	Commenter (Town of Somerset) notes that as indicated on page 38 of the PSS, a large percentage of the Project Site is designated as prime farmland and prime farmland of statewide importance. Commenter is concerned about destruction of prime farmland and feels that Lighthouse Wind should study this as a part of the Project Scope.	The Certificate Application will include the requested information.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.35	Commenter (Town of Somerset) notes that although Lighthouse Wind mentions the possibility of blasting on pages 41-42 of the PSS, it has not mentioned that large scale blasting could occur in close proximity to residential areas. A detailed study of the impact on residents to be caused by large scale blasting operations must be undertaken. In addition, commenter insists that Lighthouse Wind be made financially liable for any interruption in enjoyment of property caused by Lighthouse Wind's blasting and construction operations.	As indicated in the PSS, the Certificate Application will include a preliminary blasting plan, if blasting is required, which will include an assessment of the potential impacts to nearby structures, buried infrastructure, and other improvements that may be present in the affected area.
95	Vacco, D. (Town of Somerset)	95.36	Commenter (Town of Somerset) notes that Lighthouse Wind fails to address whether the turbines footings will have a lasting impact on soils as a result of concrete leaching and asks if concrete footings will be buried during the decommissioning process, if so, how would this effect soil chemistry and drainage?	Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soils acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project Area would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions. Removal of turbine foundations will be described in the Decommissioning Plan to be included in the Certificate Application. It is anticipated that turbine foundations will be removed to a depth of 4 feet.
95	Vacco, D. (Town of Somerset)	95.E9.19	Commenter (Town of Somerset) requests that a Mitigation Plan be identified for any impacts to private wells and septic systems, foundations, public roads, and infrastructure from vibration due to construction related activities (and the operation of the turbines).	A description of potential impacts to nearby structures, buried infrastructure, and other improvements (inclusive of wells) due to blasting will be included in the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.20	Commenter (Town of Somerset) expresses a desire that Criteria be identified for locating turbines in areas where blasting or pile driving will occur, (minimum setbacks from structures, roads, infrastructure, etc.)	As discussed in the PSS, if blasting or pile driving is required, the Certificate Application will include mitigation measures to limit offsite impacts to nearby structures, buried infrastructure, and other improvements.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.13	Commenter notes that Orleans County is part of the Niagara Escarpment and that USFWS Region 3 Guidance specifies the Niagara Escarpment as an area where siting of wind turbine projects should be avoided. The commenter also provides a link to Fish and Wildlife Guidance in Wisconsin.	Lighthouse Wind would like to clarify that the Project is in USFWS Region 5 and guidance from the State of Wisconsin is not necessarily applicable to conditions in New York State. Based on an initial review of the USFWS Region 3 guidance, there is also no indication that the commenter's statement is accurate. Additionally, the Niagara Escarpment in Niagara and Orleans County is located approximately 6 miles south of the southern extents of the Project site.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.5	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter would like Lighthouse Wind to describe the effect of jacking, drilling or blasting on wildlife, water resources, and drainage patterns at each turbine foundation, and cumulatively for all turbine foundations throughout the Project site.	An assessment of impacts due to shallow bedrock removal will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.6	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter would like further information on the decompaction processes and how closely they return soil to original conditions so that mitigation of long term effects of soil compaction on plant growth, drainage, and soil fauna can be evaluated.	The requested information regarding topsoil decompaction procedures and mitigation measures will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.22	Commenter (DPS) recommends that significant consideration of construction-related impacts in agricultural and other lands should be given in Project Layout, planning and development of Best Management Practices (BMPs). Commenter notes the soils on relatively low slopes, fine-grained soils, and limited-permeability soils in the Project Area will pose a significant challenge to Project-related stormwater management and drainage facilities during site development and facility construction activities, carrying through to final restoration and follow-up practices. Commenter believes that standard BMPs are potentially insufficient to address the limitations and conditions in the Project Area for extensive areas of access road and turbine site development, including topsoil stripping and stockpiling. Commenter notes that potential on- and off-site impacts may result including localized flooding, water quality degradation, and sedimentation in sensitive areas. Commenter does not believe that the statement that "All of these impacts would be confined to the properties of participating landowners" (PSS page 12) is likely to be realistic except under "ideal" or near-drought conditions and with perfect implementation of plans, whereas, weather and project schedules can create uncertainty and pressures to continue construction activities under challenging conditions.	Lighthouse Wind will consider construction-related impacts on agricultural and other lands during Project layout siting and during planning and development of BMPs for stormwater management.
102	Behnke, H. (DPS)	102.81	Commenter (DPS) notes that the PSS should include a full description of the proposed geotechnical investigations proposed for evaluating the subsurface conditions in the Project area. Any proposed geotechnical investigations should include methods for evaluating depth to bedrock, soil types, and bedrock types. Geotechnical borings should be advanced in proposed locations of turbine foundations, road construction, underground collection line installation, and areas where horizontal directional drilling (HDD) is considered for installation of collection lines.	As stated in Section 2.6.3 of the PSS, Lighthouse Wind will prepare a geotechnical investigation protocol, which will be presented in the Certificate Application along with results of the preliminary geotechnical investigations. These investigations will be sufficient to evaluate existing geology and soil conditions in the Certificate Application. Final design of the proposed facilities may require additional geotechnical investigations, which will be completed if necessary at that time.

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

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102	Behnke, H. (DPS)	102.82	In reference to the PSS at page 39, commenter (DPS) would like Lighthouse Wind to provide a description of all the anticipated geotechnical testing to be performed for determining the method/methods to be employed for bedrock removal. Commenter would also like a description of the construction activities involved with the above noted bedrock removal methods and a brief description of typical work space areas required for each activity. Commenter would like Lighthouse Wind to provide all geotechnical boring logs and analysis to Staff regarding these studies in the application.	As stated in Section 2.6.3 of the PSS, a preliminary geotechnical investigation will be conducted in accordance with the geotechnical investigation protocol to be developed based on Project engineering design and presented in the Certificate Application. Results of preliminary geotechnical investigations (including boring logs and analysis conducted) will be presented in the Certificate Application. The Certificate Application will also include a description of excavation techniques and designation for storage areas.
102	Behnke, H. (DPS)	102.83	Commenter (DPS) notes that the PSS should include a description of planned studies to confirm the nature and extent of soil types within the Project area and says that soils containing large quantities of limestone may be corrosive to steel, particularly if soils are located in an area of a shallow water table. Commenter states that the existing soils in the Project area are generally characterized as having a high potential for the corrosion of steel. The application should evaluate the suitability of existing soils types for reuse as backfill, particularly for turbine foundations or other structures containing steel support systems. This evaluation should be considered in the preliminary calculations of fill materials that will be required for the Project. The application should also include figures showing the proposed locations of soil stockpiling areas. In the application, commenter would like Lighthouse Wind to provide a description of any corrosion protection of reinforcement in accordance with the "Building Code of New York State" and the American Concrete Institute (ACI) 318.	A preliminary geotechnical investigation will be conducted in accordance with the geotechnical investigation protocol to be developed. The investigation is anticipated to include a review of publicly-available information and site-specific soil borings to assess soil characteristics and suitability. The Certificate Application will include the requested information.
102	Behnke, H. (DPS)	102.84	Commenter (DPS) notes that a Revised Scoping Statement should include a description of the methods proposed for identifying the locations of subsurface tiles and measures for minimizing disruption to agricultural drainage systems during construction. Such methods should include consultation with agricultural land owners and the Orleans County Soil and Water Conservation District. The application should include detailed descriptions of mitigation measures for protection and restoration of subsurface drainage.	Lighthouse Wind expects to work closely with agricultural landowners and NYSDA&M to avoid and minimize impacts to existing land uses, which will include identification of subsurface drainage systems. As stated in the PSS, Lighthouse Wind will adhere to the NYSDA&M "Guidelines for Agricultural Mitigation for Wind Power Projects", which includes measures for the protection and restoration of subsurface drainage systems during construction.  Individual landowners will have input on the location of facilities, and any damaged drain tile will be repaired. Copies of maps of any subsurface tiles will be obtained from county resources as well as from individual landowners.
102	Behnke, H. (DPS)	102.85	Commenter (DPS) references a subsection of the PSS which says: "The Project will also comply with the 2010 Building Code of New York State." Commenter believes the text noting the "2010 Building Code of New York State" should be replaced with "the latest edition of the Building Code of New York State."	Lighthouse Wind will comply with the latest edition of the Building Code of New York State at the time of final design.
110	Isselhard, A.	110.8	Commenter notes that a geologic fault is located 40 miles east of Somerset, which interrupted previous plans for a nuclear plant in the area. Commenter asks if this fault is a threat to Lighthouse Wind and public safety.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. An assessment of seismic vulnerability will be included in Exhibit 21 of the Certificate Application. This will include a review of publicly available resources, manufacturer data regarding seismic rating, and site-specific geology and soil information obtained through geotechnical investigations.
<b>Terrestrial Ecology and Wetlands (PSS Section 2.7/Application Exhibit 22)</b>				
6	American Bird Conservancy	6.1	The commenter expresses concern that the Project poses unacceptably high risk to protected wildlife species. Commenter asks how many birds move through this area annually. Commenter remarks that the region, within one to six miles of the shoreline, is a major pathway for migratory song birds and raptors. Commenter states that the western NY southern shore of Lake Ontario is also an important breeding and wintering habitat for grassland birds. Commenter also states the Project lies just north of several important wildlife habitats, including the Iroquois National Wildlife Refuge, and Tonawanda and Oak Orchard Wildlife Management Areas. Commenter believes that these habitats serve as an important migratory pathway and when resting waterfowl and other birds resume their migration they will head directly north into the vicinity of the Project.	The total number of birds that move through this area varies substantially by season at the Project site. The Project site is generally characterized by year round resident, breeding, migrating and wintering birds. It is probable that the greatest numbers of birds at any given point in time in or near the Project would be during spring migration; however, a large portion of these birds would be nocturnally migrating species passing briefly over the Project at altitudes above the rotor swept heights. Some of these migrating species may land in or near the Project, using the Project site as a stopover site for rest, forage and energy recharge. Some of these species may be at risk of collision with turbines during "fallout" (as they ascend or descend to/from migratory flight), and some species that remain or are present at other times of the year (breeding, wintering) may also be at risk. All may be affected by the minor habitat change associated with installation of Project facilities; however, it is generally concluded that wind facilities are not likely to impact populations of any migrant bird species. Therefore, it is reasonable to consider siting Project facilities to minimize impacts to birds, particularly protected species, and to implement appropriate operational and monitoring protocols to ensure no significant adverse impact at the local or regional population scale. The ABC cites Braddock Bay Hawk Watch counts as indicative of the importance of this area to migrating raptors to the Project site. Studies completed to date by Lighthouse Wind suggest that average daily raptor passage rates recorded across 17 survey days at the Braddock Bay Hawkwatch site were approximately 7.5 times higher than at the Project site.

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
6	American Bird Conservancy	6.2	<p>Commenter recommends the Project be sited at least 6 miles or greater from the lake shore based on fall migration patterns. Commenter cites USFWS and the Nature Conservancy's recommendations of 3 and 5 miles, respectively and long-term studies completed by the Nature Conservancy. Throughout the letter the commenter expresses their belief that this Project is poorly sited.</p>	<p>Lighthouse Wind respectfully disagrees with ABC's recommendation to site the Project &gt; 6 miles from the lake shore based on fall migration patterns. Presence of large numbers of birds, as documented in the referenced studies ( ) does not inherently connote risk of impact. Furthermore, the USFWS and TNC's recommendation of a 3 and 5 mile buffer setback are based entirely on bird density, the USFWS study has not been peer reviewed, nor will USFWS make the radar data used to generate their recommendation available for Lighthouse Wind's assessment. Evidence from operating Texas Gulf Projects, as well as many projects with migratory concentrations of birds (such as Appalachian ridgeline projects) suggests that Lighthouse Wind Project can operate responsibly, with minimal impacts to migrating birds, and that monitoring to evaluate the effectiveness of operating protocols is appropriate. The Commenter suggests that The Nature Conservancy's (France et al., 2012) study supports a recommendation to site wind projects &gt;6 mi from Great Lake shorelines: this is wholly inaccurate and misrepresentative of the findings of France et al., 2011. The authors actually conclude that their modeling indicates that Great Lakes coastal zones are important stopover habitat, as are some inland areas, however, they are evaluating parameters of bird use (richness, abundance) and landscape/habitat variables as predictors of use, and NOT evaluating wind project siting by any means in their study. The authors specifically point out that when evaluating threats to existing available habitat that on the ground assessments of habitat quality be used, and specifically caution that remotely sensed data and their own models are coarse, and that fine-scale interpretation and use should be done with caution. No comments are made by TNC specifically regarding siting of wind projects. ABC's jump from bird presence (species richness and abundance) and proximity to lakeshore equals bad siting is alarmist and not supported by the facts.</p>
6	American Bird Conservancy	6.3	<p>Commenter remarks on the unknown effectiveness of many forms of mitigation (radar/observation to shut down turbines, lighting, managing habitat, reducing prey species, retrofitting associated transmission lines and towers). Commenter further states that siting is the most effective form of mitigation, and project is not sited properly in their opinion.</p>	<p>Using the known presence of ephemeral concentrations of migrating birds to suggest that the Project should not be located here defies understanding of wind/wildlife interaction, particularly during migration in which the majority of birds are above the rotor swept area and when birds have been documented to see and avoid turbines. Lighthouse Wind agrees that proper siting is important, but in areas with short term periods of elevated bird use, implementation of operational protocols in response to preconstruction and operational monitoring information will effectively keep impacts below significance thresholds. To date, Lighthouse Wind is not aware of research that confirms that siting is the most effective form of mitigation, nor that high concentrations of migrating birds and migratory stopover use by birds is associated with higher levels of mortality.</p> <p>ABC states that, "Lighthouse Wind will argue that it knows how to mitigate impacts of industrial scale wind development, but this is not the case. In point of fact, we do know what actually works with regard to mortality mitigation for wind energy projects, especially for birds." This statement contradicts ABC's premise that siting is the "only" effective means of mitigating impacts to birds. Lighthouse Wind works closely with agencies that regulate protection of bird species to study and understand potential risks and respond appropriately with siting and operational measures, monitoring, and adaptive management planning. In the case of this Project, Lighthouse Wind has requested that USFWS access bird mortality data for two well-studied Texas Gulf Coast wind projects (i.e., Gulf Wind and Penescal Projects) that are sited along the Texas Gulf Coast and present a risk profile of concentrating higher numbers and a more diverse community of migrating and wintering birds than the south Lake Ontario shoreline during spring and winter. Substantial fatality monitoring has been completed in coordination with USFWS at these sites to understand the potential effect of utility scale wind projects sited in shoreline locations. USFWS has not acted on this request to inform our collective understanding of bird mortality in this setting; however, Lighthouse Wind knows based on personal communication that these projects present bird mortality estimates similar to typical, well-sited Midwestern agricultural landscape wind Projects. The commenter is pointing out concerns regarding the siting of the Project, but is apparently unaware of data that could be used to objectively evaluate their concerns, and inform risk-related decisions, operational protocols and monitoring plans.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
6	American Bird Conservancy	6.4	Commenter discusses cumulative impacts and remarks all of the current anthropogenic and natural factors on bird and bat populations should also be accounted for, as well as impacts from additional infrastructure associated with the development (power lines, roads, and towers).	Lighthouse Wind agrees with ABC that cumulative effects of this Project, coupled with all other anthropogenic and natural factors on bird and bat populations should be carefully considered, and that loss of endangered or threatened species would be potentially significant, especially if unmitigated. Therefore, a robust Bird and Bat Conservation Strategy will be developed for the Project, which documents the impact avoidance and minimization measures to be implemented in design, construction and operation of the Project, the monitoring plan to evaluate their effectiveness, and the potential Adaptive Management responses to be implemented should impacts exceed anticipated levels or be determined to warrant management action. Likewise, risk of impact to federal and state-listed species will also be carefully evaluated for the Project, as it is for all Lighthouse Wind projects, and measures to permit and mitigate any predicted take would be implemented to ensure no significant adverse impact.  In response to ABC's comment regarding roads and powerlines, no new transmission lines are necessary for the Project because it interconnects to an existing transmission located onsite, at the existing coal burning generating facility. Because the Project is sited in a primarily agricultural landscape, with roads intersecting the Project site, only short sections of new roads in primarily fragmented and disturbed cropland will be required to access turbines and operate and maintain the Project. Lighthouse Wind acknowledges that agricultural lands provide important bird habitat; however, siting in such common and disturbed habitats is generally considered a Best Management Practice by the industry and regulating agencies (e.g., USFWS and state wildlife agencies).
6	American Bird Conservancy	6.5	Commenter states that preconstruction risk should include nocturnal radar studies or studies during inclement weather (overcast and windy), both times when birds may come to the ground or fly at heights that could place them at elevated risk. Additionally, the commenter expresses concern that it will never be known how many birds and bats are killed because mortality data isn't shared with the public, even though these are public trust resources.	The south shore of Lake Ontario is known to experience heavy avian migration activity during spring. USFWS collected nocturnal radar data in spring 2009 and per Jeff Gosse (USFWS Region 3 Energy Coordinator) a whitepaper describing the methods and results is expected for release in spring 2016. Lighthouse Wind has requested the radar data from USFWS for use in evaluating risk and developing operational protocols to avoid potentially significant impacts during the periods of higher risk (specific weather and visibility situations that may bring more targets into the rotor swept heights); however, USFWS has elected not to share these data or allow their analyses to be reviewed by qualified radar ornithologists. This would be very helpful in understanding the relationship of bird movements to weather variables that could inform operational protocols for the Project. Lighthouse Wind has coordinated extensively with NYSDEC and USFWS and agreed on a study plan to evaluate risk to birds and bats, and radar studies were not specifically requested or agreed upon for this Project.
6	American Bird Conservancy	6.6	Commenter notes that few peer-reviewed studies that are available on bird and bat kill at wind energy facilities show a wide range of impact and says that Smallwood's (2013) study, based on reports from 31 wind energy projects, estimated losses of 573,000 birds and 888,000 bats annually in the United States alone at 2012 build-out levels. Continuing on, the commenter notes that this was merely a snapshot taken at a particular point in time and there are many more turbines and more planned, which implies that many more birds and bats are currently being killed and many more will be lost in the future.	ABC suggests in the concluding remarks of its letter that "any large scale wind turbine facility along the lake shore will put millions of birds in danger of collision, death, and/or displacement," Lighthouse Wind agrees that as with most wind energy projects, over the course of time, millions of birds will occur in proximity to the Project, many if not most well above the turbine tip heights. As referenced by ABC, 2012 nationwide estimated bird fatalities from wind projects were 573,000/yr., which would have included several existing lakeshore and Gulf Coast wind projects with risk profiles resembling that of the Lighthouse Wind Project. For ABC to suggest that the Lighthouse Wind Project would potentially put such exaggeratedly high numbers at risk through statements like this is disingenuous and lacks scientific credibility.
12	Smiley, A.	12.2	Commenter asks how proper construction techniques remedy permanent changes to wetlands and wetland species displaced by project; in addition to avian wildlife.	Lighthouse Wind intends to avoid and minimize the potential for impacts to wetlands to the greatest extent possible during the construction of the proposed Project. However, as discussed in PSS Section 2.7 impacts to wetlands and wildlife will be minimized by conducting proposed field studies (e.g. wetland and stream delineation) to locate existing wetlands and the potential for wildlife habitat. These reports will be provided as part of Exhibit 22. To the extent that the Project results in permanent impacts to wetlands, a draft compensatory wetland mitigation plan would be developed as required by both state and federal wetland permitting regulations.
13	Markey, S.	13.2	Commenter requests a valid link to the 2012 USFWS data (USFWS Land-Based Wind Energy Guidelines).	The USFWS <i>Land -Based Wind Energy Guidelines</i> are available at: <a href="http://www.fws.gov/ecological-services/es-library/pdfs/WEG_final.pdf">http://www.fws.gov/ecological-services/es-library/pdfs/WEG_final.pdf</a>
13	Markey, S.	13.3	Commenter notes that one survey year may not be sufficient to document the temporal and spatial wildlife use of the Project area and additional surveys may be needed. Considering the extreme cold and snow experienced in of winter 2015, and a late spring along lakeshore, can limited one year studies be considered valid investigations of avian and bat use and migration in Project area? Commenter requests additional studies.	One year of bird and bat studies has been completed. In a meeting to discuss preliminary findings, NYSDEC requested that Lighthouse Wind complete a 2nd season of Winter Grassland Raptor Surveys, which is ongoing at this time. Additionally, Lighthouse Wind is completing a second year of general avian/eagle use studies to continue to evaluate seasonal and annual variability in bird activity. Regarding bat use, species composition and activity patterns were carefully evaluated in 2015 and no additional studies have been recommended by USFWS or NYSDEC. Generally, bat activity patterns and species composition are fairly stable and predictable from year to year, and siting and operational protocols to minimize impacts are well established.
13	Markey, S.	13.4	Commenter notes that USFWS found Lighthouse Wind plans to monitor bat activity deficient and suggested that bat acoustic surveys should follow the 2015 Range Wide Indiana Bat Survey Guidelines. Were these suggested guidelines followed for bat studies conducted for Project?	Two types of bat surveys were completed in 2015. One to assess general bat activity and species composition at ground level and elevated heights (NYSDEC protocols) and one to assess presence or probable absence of federally listed species (USFWS protocol suggested by the commenter).

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Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
13	Markey, S.	13.5	Commenter notes that USFWS strongly recommended Lighthouse Wind carefully consider potential effects of the Project on wildlife including bats and migratory birds as risk to wildlife from operating wind turbines could rise to severe levels. Previously, USFWS has recommended projects be built at least 3 miles from shoreline of the Great Lakes to reduce these risks. USFWS advised Lighthouse Wind to consider regulatory requirements of ESA, BGEPA, and MBTA in determining whether placement of the Project is appropriate.	In accordance with the USFWS Land based Wind Energy Guidelines, Lighthouse Wind is coordinating with USFWS and NYSDEC on Tier 3 studies to evaluate risk and inform siting and operational decisions. At this stage in development of the Project, it would be inappropriate to apply a blanket recommendation from USFWS in response to Tier 3 studies of a wind project located in Michigan.
16	Schwabel, P. and P.	16.1	Commenter asks what studies Lighthouse Wind has completed and what management plan has been developed for pollinator management both before and after construction.	A pollinator management plan is not required as part of the Article 10 regulations and no related studies have been recommended or completed. However, Lighthouse Wind offers to consult with both the NYSDA&M and the local office of the Cornell Cooperative Extension on this issue and will request their input on possible mitigation measures if such an impact is apparent or necessary.
16	Schwabel, P. and P.	16.3	Commenter states that the issue being addressed in this letter is not related to raptor or bat mortality caused by collision with turbines, but it is significant, as recognized by the Governor of the State of New York. Commenter continues that PSS has stated that Lighthouse Wind will address issues determined to be significant. Commenter asks what criteria have been developed for an oversight committee to determine when events are considered 'significant', and what criteria will be applied for a determination of significance.	An oversight committee is beyond the requirements of the Article 10 regulations; however, a Complaint Resolution Plan will be presented in the Certificate Application and discussed in Exhibits 12, 15 and 19 to facilitate the resolution of issues and complaints that may arise within the local community.  Determinations of significant adverse impacts would be under the purview of state and federal regulatory agencies. Lighthouse Wind works closely with these regulatory agencies to avoid or mitigate potentially significant impacts to resources of concern that are protected by regulation.
16	Schwabel, P. and P.	16.5	Commenter asks what studies have been conducted relative to the proposed Project to address the potential effects of the following on pollinators: (1) herbicides to control unwanted vegetation (2) insecticides (3) soil sterilants used to prevent any vegetative growth, sometimes causing erosion as a result of no ground cover for extended time periods (4) rodenticides and (5) other chemicals, including oils and other fluids leaking from the generators.	A pollinator management plan is not required as part of the Article 10 regulations and no related studies have been recommended or completed. Lighthouse Wind does not currently propose the use of herbicides, insecticides, or soil sterilants for the construction or operation of this Project. If use is proposed, it would be completed in accordance with local, state, and federal regulations governing storage and application of these substances. As stated in Section 2.3 of the PSS, a Spill Prevention, Control, and Countermeasure Plan will be drafted to identify all substances to be stored on site and spill response measures outlined in the unlikely event a spill or leak of hazardous substances such as oil or fluids from other equipment during the construction or operation of the Project occurs. The Spill Plan will be included as part of the draft SWPPP which will be included as part of the Certificate Application.
16	Schwabel, P. and P.	16.6	Commenter asks that Lighthouse Wind list independent ecologists who are expert in pollinator management and that have been consulted in the preparation of plans. Commenter asks if these individuals are associated with Cornell University's College of Agriculture and Life Sciences or another university.	A pollinator management plan is not required as part of the Article 10 regulations and no related studies have been recommended or completed. However, Lighthouse Wind offers to consult with both the NYSDA&M and the local office of the Cornell Cooperative Extension on this issue and will request their input on possible mitigation measures if such an impact is apparent or necessary.
23	Retired Airlift Wing Commanders Incorporated - Town of Somerset	23.2	Commenter notes that the Project site is in the flyway of migratory birds. Commenter is concerned that a westerly shift in the flyway, as a result of the wind turbines, could heavily impact flight safety at NFARS.	Displacement of avian flight paths by turbines would generally be limited. Any avoidance is expected to be outside of the Rotor Swept Area (RSA) or outer turbines, but not likely much more, and this would only be for birds within or near the RSA.  As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1).
24	Evans, W. (On behalf of Town of Somerset)	24.1	Commenter claims deficiency in Avian and Bat Study Plans and says that it fails to address nocturnal bird migration and concentration dynamics: What are the density characteristics of the flight? In other words, how many, and where are the birds flying when they opt to circumnavigate rather than cross Lake Ontario? If there is a higher concentration of migration birds near the lake shore, how far does the concentration phenomenon extend inland? Which direction do nocturnal migrants go when they circumnavigate the lake? Do lakeshore concentrations from lake Erie spill onto Lake Ontario shoreline? What are altitudes of the circumnavigating flights?	Many of these questions are informed by NEXRAD evaluation, and existing radar data from studies in and near the Great Lakes, including the south shore of Lake Ontario. Lighthouse Wind plans to carefully evaluate these types of questions in coordination with NYSDEC and USFWS to ensure that impacts to nocturnal migrant birds are within acceptable levels.
24	Evans, W. (On behalf of Town of Somerset)	24.2	Commenter notes that none of the following species are adequately addressed (in regards to nocturnal migration) by the Lighthouse Wind study plan:  short-eared owl (NYS: Endangered), least bittern (NYS: Threatened), upland sandpiper (NYS: Threatened), Sedge Wren (NYS: Threatened), Henslow's sparrow (NYS: Threatened), American bittern (NYS: Special Concern), common nighthawk (NYS: Special Concern), whip-poor-will (NYS: Special Concern), red-headed woodpecker (NYS: Special Concern), homed lark (NYS: Special Concern) golden-winged warbler (NYS: Special Concern), cerulean warbler (NYS: Special Concern) vesper sparrow (NYS: Special Concern), grasshopper sparrow (NYS: Special Concern), bobolink, Kirtland's warbler (Federal Endangered)	Many of the special-status birds listed are very rare, pass through the Project site very briefly if at all, and are uncommon or undocumented as wind project fatalities. However, in accordance with agency recommendations, Lighthouse Wind will obtain permits if take of state or federal-listed bird species is likely to occur. Such permits require appropriate mitigation to ensure no significant impact.

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24	Evans, W. (On behalf of Town of Somerset)	24.3	Commenter notes that spring nocturnal migration studies are not included in the Avian and Bat Study Plans and that Lighthouse Wind and its environmental consultant may be unaware of potentially large impacts the Project could have.	Studies have been developed in accordance with agency recommendations and risks to spring nocturnal migrants will be carefully evaluated in coordination with USFWS and NYSDEC. The south shore of Lake Ontario is known to experience heavy avian migration activity during spring. USFWS collected nocturnal radar data in spring 2009 and per Jeff Gosse (USFWS Region 3 Energy Coordinator) a whitepaper describing the methods and results is expected for release in spring 2016. Lighthouse Wind has requested the radar data from USFWS for use in evaluating risk and developing operational protocols to avoid potentially significant impacts during the periods of higher risk (specific weather and visibility situations that may bring more targets into the rotor swept heights); however, USFWS has elected not to share these data or allow their analyses to be reviewed by qualified radar ornithologists. This is unfortunate, as it would be very helpful in understanding the relationship of bird movements to weather variables that could inform operational protocols for the Project that would minimize risk to nocturnal migrants. Lighthouse Wind works closely with agencies that regulate protection of bird species to study and understand potential risks and respond appropriately with siting and operational measures, monitoring, and adaptive management planning. In the case of this Project, Lighthouse Wind has requested that USFWS access bird mortality data for two well-studied Texas Gulf Coast wind projects (i.e., Gulf Wind and Penescal Projects) that are sighted along the Texas Gulf Coast and present a risk profile of concentrating higher numbers and a more diverse community of migrating and wintering birds than the south Ontario shoreline during spring and winter. Substantial fatality monitoring has been completed in coordination with USFWS at these sites to understand the potential effect of utility scale wind projects sited in shoreline locations. USFWS has not acted on this request to inform our collective understanding of bird mortality in this setting; however, Lighthouse Wind knows based on personal communication that these projects present bird mortality estimates similar to typical, well-sited Midwestern agricultural landscape wind Projects. The commenter is pointing out concerns regarding the siting of the Project, but is apparently unaware of data that could be used to objectively evaluate their concerns, and inform risk-related decisions, operational protocols and monitoring plans.
24	Evans, W. (On behalf of Town of Somerset)	24.4	Commenter claims that the Project fails to incorporate "expanded" Preconstruction Studies recommended by NYSDEC for projects of this type. NYDEC Guidelines for Commercial Wind Energy indicates that "expanded" preconstruction studies may be recommended if a developer proposes to construct a wind energy project in "proximity (approximately 5 miles) to the Atlantic coastline, the shoreline of one of the Great Lakes...". Commenter notes Project qualifies for "expanded" studies based on the NYDEC Guidance. Furthermore, the Project would be the first large scale commercial wind energy facility in New York State located in the shoreline region of the Great Lakes and it is important that detailed pre-construction nocturnal migration studies are undertaken at the proposed Project site to provide an understanding of the scale of the potential avian collision impact at night.	Bird and bat study plans have been developed in coordination with NYSDEC and USFWS and Lighthouse Wind has been responsive to the recommendations. The Steel Winds Project in Lackawanna, New York is a 35MW project consisting of 22 utility scale turbines located in close proximity to Lake Erie. The first phase of the Project (8 turbines) became operational in 2007 and the second phase (14 turbines) has been operating since 2012.
24	Evans, W. (On behalf of Town of Somerset)	24.5	Commenter notes that the Project Avian Study Plan neglects to address Purple Martin and Swallow Roost site mapping in regards to mid-to-late summer roosts.	These species are evaluated in the breeding birds and avian use studies being implemented onsite.
24	Evans, W. (On behalf of Town of Somerset)	24.6	Commenter notes that Project Avian Study Plan fails to recognize or address cumulative impacts to avian species. Commenter requests that cumulative impact analysis be conducted addressing: 1. The potentially 10x to 100x higher fatality rates of coastal wind projects. 2. The fact that standard fatality studies are not robust enough to enable modelling of wind energy population impacts to special status species. 3. The fact that wind energy projects have a projected life span of up to 30 years. 4. The fact that many species have been in long-term decline and their status is likely to change over the lifetime of a wind project. For example, both Upland Sandpiper and Henslow's Sparrow are currently listed as Threatened in NY. Both are on the cusp of being listed as Endangered and in all likelihood will be listed as such in the near future. Other species that currently have no special status listing are likely to be listed during the course of currently proposed wind projects in NY. In many cases these future listings can be forecasted based on current rates of decline (e.g., Purple Martin).	Lighthouse Wind will consider these comments in coordination with USFWS and NYSDEC as study results are reviewed and used to make informed siting and risk management decisions.
34	Bansbach, J.	34.2	Commenter cites PSS Section 2.7 and states that there is no mention of Canada Geese ( <i>Branta canadensis</i> ) or other non-threatened waterfowl. Commenter notes that residents of the Town of Yates know the skies are blackened by flocks of migrating geese and ducks during the fall and spring months. Commenter is concerned that thousands of these non-protected waterfowl will be killed by the 180 mph blade tips of the proposed giant wind turbines as they fly from the fields to the lake and back to the wildlife refuge.	Generally, wind projects have minimal effect on waterfowl, including geese; however, studies designed to evaluate seasonal and annual use patterns of birds, including Canada geese, will be used by USFWS and NYSDEC to evaluate potential effects of the Project.

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36	Skinner, M.A & J	36.2	Commenter states their concern of the imposition of huge wind turbines into a major lane of bird migration. Commenter cites PSS Section 2.7 and notes that there are many endangered and threatened species of birds that live and migrate through the proposed Project site. Commenter adds that while Lighthouse Wind presents mitigation proposals throughout much of the PSS, there is no mention of the amount of birds and bats that would be killed or how that number might be mitigated. Commenter states that Lighthouse Wind does not include numbers of wildlife mortality.	Studies designed to evaluate seasonal and annual use patterns of birds will be used by USFWS and NYSDEC to evaluate potential effects of the Project and make informed decisions to minimize or mitigate anticipated impacts.
40	Ewald, B. (Lakeshore Nature Tours, on behalf of Town Of Somerset)	40.1	Commenter states that the southern shore of Lake Ontario is a significant leading line in the spring migration of raptors for over 100 years, calling it the largest flyway in abundance in eastern North America. Commenter cites the Braddock Bay Hawkwatch as a historical record of raptors that have passed through the Project Site, and states that raptors are "funneled" by the weather systems and topography along the lakeshore.	Lighthouse Wind is completing year round avian use studies, which include detailed assessment of spring and fall raptor migration and comparisons of findings to those at the Braddock Bay Hawkwatch location. Study results will be used by USFWS and NYSDEC to evaluate potential effects of the Project and make informed decisions to minimize or mitigate anticipated impacts.
40	Ewald, B. (Lakeshore Nature Tours, on behalf of Town Of Somerset)	40.2	Commenter states that the Project Avian and Bat Study Plan fails to cover the full extent of the migration period. Commenter explains certain species migrate as early as February and as late as June, and a significant movement in July and August (associated mainly with juveniles). Commenter requests that the study plan should cover these periods.	Bird and bat study plans, including decisions regarding the timing of migration studies, were developed in coordination with NYSDEC and USFWS using generally accepted practices for evaluating species composition, relative abundance and assessing potential risk at proposed wind projects. Results of these studies will be used by USFWS and NYSDEC to evaluate potential effects of the Project and make informed decisions to minimize or mitigate anticipated impacts.
40	Ewald, B. (Lakeshore Nature Tours, on behalf of Town Of Somerset)	40.3	Commenter states that Project Study Plan conducts hit or miss (twice a week) counts in the spring and once a week counts in the fall. Commenter states that factors affecting the movement of birds, such as weather systems and species seasonality, impact the intensity or abundance of raptors on any given day. Commenter discusses frontal system impact on daily variances in species counts, and concludes it is possible that large flights of migratory raptors will be missed, resulting in skewed results and incorrect conclusions. Commenter requests daily surveys.	Bird and bat study plans were developed in coordination with NYSDEC and USFWS using generally accepted practices for evaluating species composition, relative abundance and assessing potential risk at proposed wind projects. Lighthouse Wind acknowledges that no study plan approach is perfect; however, results will be conservatively interpreted by USFWS and NYSDEC to evaluate potential effects of the Project and make informed decisions to minimize or mitigate anticipated impacts. Additionally, risk conclusions and the effectiveness of risk avoidance measures will be evaluated during operations via implementation of robust monitoring plan, allowing the opportunity to adapt and respond to identified conditions.
40	Ewald, B. (Lakeshore Nature Tours, on behalf of Town Of Somerset)	40.4	Commenter suggests that the Study Plan fails to address limitations with respect to single observer recording the migration data. Commenter is concerned that the observer will be overwhelmed with large migrations and will not accurately and fully record the complete set of data. Commenter notes researchers in nearby locations require assistance during heavier migration periods. A single observer is also limited in monitoring the significant waterbird migration (loons, grebes, waterfowl, gulls, and seabirds). Additionally, further time is required in identifying distant migrants accurately, especially those beyond the 800-meter ECPG plot, hindering the ability to monitor other birds passing along other sight lines, leading to missed, inaccurate, or incomplete data.	Studies are designed to provide systematic sampling of the Project site and seasonal periods. This sampling allows development of indices of bird activity for use in comparing locations within the Project site, comparing seasonal and annual variation, etc. The bird and bat study plans implemented onsite were developed in coordination with NYSDEC and USFWS using generally accepted practices for evaluating species composition, relative abundance, seasonal and annual variation, and assessing potential risk at proposed wind projects. Results of these studies will be used by USFWS and NYSDEC to evaluate potential effects of the Project and make informed decisions to minimize or mitigate anticipated impacts.
40	Ewald, B. (Lakeshore Nature Tours, on behalf of Town Of Somerset)	40.5	Commenter states that although the locations for the 1-hour point counts are scattered throughout the proposed Project site, they do not address the "fluid" nature of raptor migration along lakeshores and coastlines. Commenter explains wind conditions and microclimate affect can result in a ridge or line of rising warm air, paralleling the shoreline, which the raptors use, and can shift several miles within minutes; therefore thousands of individuals could potentially be missed by a single observer. Commenter expresses that multiple observers are required to adequately and accurately document the raptor migrations.	Avian study locations are intentionally positioned at near, mid and far locations from the lakeshore, and across representative habitats onsite to address the commenters concern. Individuals are certainly missed as a result of systematic sampling techniques; however, such techniques were approved by the USFWS and NYSDEC for this Project, are standard practice for the industry, and allow development of indices of bird activity for use in comparing locations within the Project area, comparing seasonal and annual variation, and assessing risk.
42	Salmons, S.	42.1	Commenter notes that her family has spotted Snowy Owls twice within the Project site within the last few years. Commenter notes that the snowy owls are endangered due to these owls having a hard time finding food and poachers killing them for feathers. Commenter includes photos of owl to demonstrate area where it was located.	Winter Grassland Bird surveys were completed during winter 2014-15 and are being repeated in winter 2015-2016, in accordance with NYSDEC protocols, to assess risk to snowy owls and respond to findings in cooperation with NYSDEC and USFWS.
42	Salmons, S.	42.2	Commenter expresses concern in regards to Project being built within migratory pathways of birds.	Lighthouse Wind acknowledges this concern and is therefore evaluating risk to migrating birds in coordination with NYSDEC and USFWS, which manage and regulate the species.
44	Simon, P.	44.1	Commenter sent an email (Appendix 2 to comment letter) to Lighthouse Wind and asked questions about the monitoring that was being conducted at the meteorological (MET) tower that is located in the Town of Yates on Marshall Rd. Lighthouse Wind responded with an e-mail on October 23, 2015 (Appendix 3). After reading the email, the commenter was concerned about bat monitoring being conducted. Commenter is concerned there would only be one form of surveillance that was going to be completed (acoustic monitoring at the MET tower). Since commenter was not satisfied with Lighthouse Wind's answers and since they didn't name the "third party wildlife consultant" or the "applicable agencies," commenter decided to try to get more information. Commenter contacted USGS and independent researchers (see Appendices 4-5). The independent researchers provided reading materials which commenter includes as additional appendices 6-7.	Comment noted.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
44	Simon, P.	44.2	Commenter notes that the monitoring of bats in the Town of Yates in the "preconstruction" phase of Lighthouse Wind is not adequate. Commenter also notes that bats seem to be attracted to wind turbines.	Bat risk is carefully evaluated and addressed in coordination with NYSDEC and USFWS. Fortunately, most bats are only at risk of colliding with wind turbines during a short period of the year (fall migration), and primarily during periods of low wind speeds. Therefore, studies have been designed to assess the species present and the timing of their risk periods, and are thus able to manage the Project to present very low risk to species of conservation concern.
44	Simon, P.	44.3	After the PSS was filed, commenter read that acoustic monitoring would not be done in numerous locations throughout the Project site. Commenter quotes Lighthouse Wind response, "One year of bat acoustic monitoring will be conducted at one meteorological (met) tower planned for installation in the Project site during spring 2015. The monitoring will be used to broadly characterize species groups present and general bat activity in the detectable range of the acoustic devices during the bat activity period (from April 17 to approximately October 15)."	Two types of bat surveys were completed in 2015. One to assess general bat activity and species composition at ground level and elevated heights (NYSDEC protocols) and one to assess presence or probable absence of federally listed species (USFWS protocol suggested by the commenter). The latter survey was project-wide in potentially suitable habitat for the species.
44	Simon, P.	44.4	Commenter notes that instead of "numerous locations throughout the Project site," there would only be two monitoring detectors at one MET tower in the entire Project site that stretches across two towns and includes two different counties as well. One would be at ground level and the other would be placed in proximity to the aviation ball that is already in place on the guide wire.	Two types of bat surveys were completed in 2015. One to assess general bat activity and species composition at ground level and elevated heights (NYSDEC protocols) and one to assess presence or probable absence of federally listed species (USFWS protocol suggested by the commenter). The latter survey was project-wide in potentially suitable habitat for the species.
44	Simon, P.	44.5	Commenter states PSS does not take into account the placement of the second monitor not because of scientific data or because of past studies but because it is more convenient, it would seem, to only put it as high as is available due to an obstruction such as the aviation warning ball.	Two types of bat surveys were completed in 2015. One to assess general bat activity and species composition at ground level and elevated heights (NYSDEC protocols) and one to assess presence or probable absence of federally listed species (USFWS protocol suggested by the commenter). The latter survey was project-wide in potentially suitable habitat for the species.
44	Simon, P.	44.6	Commenter notes that the first two words in Task 3: Bat Acoustic Monitoring methodology say "One year of bat acoustic monitoring will be conducted," and in the very next paragraph it claims that it will be "(approximately 27 weeks)" of monitoring that will be done. Commenter would like clarification as to whether it is one year or 27 weeks.	Two types of bat surveys were completed in 2015. One to assess general bat activity and species composition at ground level and elevated heights (NYSDEC protocols) and one to assess presence or probable absence of federally listed species (USFWS protocol suggested by the commenter). The latter survey was project-wide in potentially suitable habitat for the species.  Generally bat activity surveys are conducted during the period of generally accepted bat activity (spring, summer and fall) and listed bat presence/probable absence surveys are completed during the summer roosting period when bats associated with maternal colonies would be onsite, if present.
44	Simon, P.	44.7	Commenter notes that the Indiana bat, a New York State and Federally listed endangered species of bat is not even listed in Table 4 of the 2.7 Terrestrial Ecology and Wetlands section of the Preliminary Scope of Environmental Impact Analysis on page 46 of the PSS. The Indiana bat is also a victim of WNS and so the population of this bat would be especially at risk if turbines were erected in their habitat.	The Project is considered outside the range of the Indiana bat; however, USFWS protocols evaluated the presence/probable absence of the species during summer.
44	Simon, P.	44.8	Commenter notes that in the PSS on page 44 under the title of "Mammals" as listed in 2.7.1.2.1 of the Terrestrial Ecology and Wetlands section that "Publicly available sources of mammal species ranges are not readily available." Commenter notes that minimal research would be necessary to compile the types of mammals in Western New York to get very comprehensive lists with detailed remarks about species, numbers, types, habitat (etc.). Commenter includes number of sources to find such lists.	Mammal species likely to occur and for which impact concerns are evident, will be addressed through the permitting process in coordination with USFWS and NYSDEC.
44	Simon, P.	44.9	Commenter notes disappointment in the short list of mammals referenced in the PSS which are likely present within the Project site. Having lived in Town of Yates for the last ten years, commenter has observed many wildlife species in their own back yard. Commenter adds that some of the species not listed in the PSS are as follows: black bear, coyote, marten, beaver, fisher, weasel, mink, skunk and porcupine. Commenter notes that there another endangered mammal species that may be located in the Project site that is not in Table 4 on page 46 of the PSS is the Allegheny wood rat. Commenter asks if there will be any studies regarding wind turbine impact on these species?	Mammal species likely to occur and for which impact concerns are evident, will be addressed through the permitting process in coordination with USFWS and NYSDEC.
44	Simon, P.	44.10	Commenter states that White Nose Syndrome is prevalent and such a threat to bats in the area of the Project site. Commenter feels that introducing another serious threat into the region is irresponsible. Commenter continues that not only does it pose a threat to bats but, it could potentially pose a threat to the economic nature of agriculture.	Bat surveys were completed in 2015 in coordination with NYSDEC and USFWS and results will be carefully reviewed to ensure no significant impact to the species mentioned in the comment.
46	Herstek, F.	46.1	Commenter cites Section 2.7 of the PSS and states that Section 2.7 does not include a map of proposed installations and therefore, a definition of the impact study area is impossible.	Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of application. Lighthouse Wind has provided a figure presenting the potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints for the entire PSS Project site as Appendix C to this response document.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
46	Herstek, F.	46.2	<p>Commenter cites Section 2.7.1.2.2 Birds, and states that the PSS does not address the potential for avian mortalities and violations of Federal wildlife laws. Commenter continues that if not appropriately designed and sited, wind turbines may negatively impact wildlife and their habitats pursuant to the Migratory Bird Treaty Act (16 U.S.C. 703-712; MBTA) and Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; Eagle Act).</p> <p>Commenter believes that the PSS fails to collect and sufficiently analyze comprehensive information concerning avian use of the Project site as required under PSL Section 164. Commenter adds that the Department of Interior/USFWS recommends that this information be collected and analyzed well in advance of project construction so that it is available to inform project siting.</p>	<p>These are important considerations for all wind projects and the Project will be designed and operated in accordance with technical input provided by agencies that manage and regulate these resources.</p> <p>PSL Section 164 is referring to the requirements of the Certificate Application which will contain the information required by this section. The PSS requirements are provided in PSL Section 163.</p>
46	Herstek, F.	46.3	<p>Commenter believes the PSS is deficient with respect to Paragraph 1001.22 stating the requirements for Exhibit 22; Terrestrial Ecology and Wetlands subparagraph (f) requiring an analysis of the impact of the construction and operation, including air emissions if any, of the facility and interconnections on vegetation, wildlife, wildlife habitats, and wildlife travel corridors, including a detailed assessment of direct and indirect impacts and identification and evaluation of the expected environmental impacts of the facility on declining species, Species of Greatest Conservation Need (SGCN), and species protected by State and Federal law and the habitats of such species.</p>	<p>PSL Section 164 is referring to the requirements of the Certificate Application which will contain the information required by this section. The PSS requirements are provided in PSL Section 163.</p>
46	Herstek, F.	46.4	<p>With respect to wind-powered facilities requirements listed in Exhibit 22, sub paragraph (h) (1), commenter feels that Lighthouse Wind does not adequately consider the proximity of the wildlife habitats at the Iroquois Wildlife Reserve in Basom, New York, the Braddock Bay Fish and Wildlife Management Center. Commenter also believes that Lighthouse Wind ignores the wildlife travel corridors of the avian migration to across Lake Ontario that attracts millions of birds annually in spring and fall through the broad area enclosed by the Towns of Somerset and Yates and that these factors are all likely to lead to a high level of avian use on the Lake Ontario shoreline that could result in high levels of avian mortality by wind turbines at the proposed Project.</p>	<p>PSL Section 164 is referring to the requirements of the Certificate Application which will contain the information required by this section. The PSS requirements are provided in PSL Section 163.</p>
46	Herstek, F.	46.5	<p>Commenter believes that the PSS fails to identify comparison areas with proximity to a Great Lakes shoreline. Commenter feels that as referenced in the DOI/FWS recommendations (Garden Peninsula in Delta County Township, Michigan) with respect to determining presence of an environmental justice areas and risk to Avian migration corridors, Lighthouse Wind should follow the DOI/FWS recommendation that no turbines be constructed within three miles of a Great Lakes shoreline.</p>	<p>Lighthouse Wind is coordinating with USFWS and NYSDEC to evaluate risk at the Project site and will respond appropriately. In the Certificate Application, Lighthouse Wind may make comparisons between the Project and the Garden Peninsula project. The Garden Peninsula project referenced by the Commenter has been subject to significant study and to dates the effects have been well within generally accepted levels. <a href="http://heritagewindenergy.com/7-years-of-pre-and-post-construction-bird-studies-at-heritage-garden-wind-farm/">http://heritagewindenergy.com/7-years-of-pre-and-post-construction-bird-studies-at-heritage-garden-wind-farm/</a></p>
48	Stilwel, D. (USFWS)	48.2	<p>Commenter (USFWS) states that the Service's Midwest Regional Office conducted acoustic and mobile marine radar studies during a portion of spring migration to gain knowledge of bird and bat movement along the south shore of Lake Ontario. A report summarizing the study is being finalized and will be forwarded to the Commission, NYSDEC, and Lighthouse Wind when completed.</p>	<p>Lighthouse Wind looks forward to reviewing this report and considering it in designing and operating a low impact Project. Lighthouse Wind notes however, that it has requested the radar data used in their analysis from USFWS for its review and application to the Project, and USFWS has denied this request. Lighthouse Wind has also requested that USFWS request bird mortality studies from two well-studied Texas Gulf Coast wind projects (i.e., Gulf Wind and Penescal Projects) that are sighted along the Texas Gulf Coast and present a risk profile potentially similar to the Project (i.e., by concentrating migrating and wintering birds along a shoreline during spring and winter). Substantial fatality monitoring has been completed in coordination with USFWS at these sites to understand the potential effect of utility scale wind projects sited in shoreline locations.</p>
48	Stilwel, D. (USFWS)	48.3	<p>Commenter summarizes their May 6, 2015 letter to Lighthouse Wind and study results, including bird movement through the area and increased potential exposure and risk if wind turbines were built, and altitude changes for nocturnal migrants at dawn. A statement is made on Page 50 of the PSS that theorizes that waterfowl, waterbird, and shorebird mortality from wind turbines is uncommon and unlikely to occur. Commenter states that site conditions and species distributions vary across sites and such a generalized statement should be removed. In contrast, the Service's radar data for the Lighthouse site show large aggregations of birds using the Project area and may indicate flocks of these birds near potential turbine locations.</p>	<p>Lighthouse Wind agrees the USFWS radar data for the Project site may show large aggregations of birds in or near the Project between ground level and very high elevations, as this is generally common knowledge. However, the comment in the PSS regarding waterfowl is strongly supported by research of operating wind projects in areas of high waterfowl concentration.</p>
48	Stilwel, D. (USFWS)	48.4	<p>Commenter (USFWS) encourages developers of existing and proposed wind energy projects to follow current Service recommendations on wind power siting and construction found in the USFWS Land-Based Wind Energy Guidelines (2012). The Service hopes to work cooperatively with wind developers to appropriately site wind projects, and consider fish and wildlife during the design, construction, and operation of these facilities.</p>	<p>Lighthouse Wind prioritizes compliance with the Guidelines and in accordance with the Guidelines, Lighthouse Wind has met with USFWS on Dec 15, 2014 to agree on study plans for the Project and again on November 12, 2015 to discuss preliminary results and year 2 study plans. Draft reports have been provided to USFWS for review and input, and all data will be shared with USFWS to ensure informed decisions are made regarding siting, design, construction and operations. We look forward continued coordination.</p>
48	Stilwel, D. (USFWS)	48.5	<p>Given that a bald eagle nest was recently found in the Project area, commenter (USFWS) notes that additional monitoring and information pursuant to the BGEPA may be needed. For example, monitoring of flight activity to and from the nest would give important information on bald eagle use of the Project airspace and potential risk of turbine collision. Following the collection of the bald eagle surveys, the Service recommends that a meeting be held to discuss the results and potential risk to this species.</p>	<p>Lighthouse Wind has met twice with USFWS to discuss monitoring for eagles and this is the first we have heard of this recommendation. Lighthouse Wind is collecting data consistent with the USFWS Eagle Conservation Plan Guidance so that informed decisions can be made regarding risk and impact consideration.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
48	Stilwel, D. (USFWS)	48.6	Commenter notes that one survey year (migratory raptor surveys) may not be sufficient to document the temporal and spatial variation of wildlife use in the Project area and additional surveys may be required. Given the location of the Project area and importance as a migratory flyway, the Service may recommend at least one additional year of monitoring to gauge migration variation per our wind energy guidelines.	Lighthouse Wind has met with USFWS twice, and has made itself repeatedly available to discuss similar topics. Lighthouse Wind continues to request specific feedback and recommendations from USFWS regarding study expectations.
48	Stilwel, D. (USFWS)	48.7	For breeding bird surveys, the Plan indicates the size of survey transects but not the locations of proposed turbines. Therefore, it is unknown if the data collected is applicable to the potential turbine locations. The transects should be established in both the Project area and control areas to establish baseline conditions. If the Project is built, all transects should be resurveyed once turbines are operating to determine any potential displacement effects.	Breeding bird surveys were completed as described in the study plan provided to USFWS for comment, with points distributed across the major habitat types present in the study area, as in the study plan provided to USFWS for comment. At this point in development it is not realistic to know where turbines will be located, therefore, the study has been designed to evaluate species composition and establish baseline conditions within the likely areas planned for development. Should USFWS request transects be resurveyed during operations, Lighthouse Wind will continue to coordinate requests for studies with USFWS.
48	Stilwel, D. (USFWS)	48.8	The unauthorized taking of birds is a violation of the law. Neither the MBTA nor its implementing regulations, 50 CFR Part 21, provide for permitting of "incidental take" of migratory birds that may be killed or injured by wind projects. However, we recognize that some birds may be killed at structures such as wind turbines even if all reasonable measures to avoid it are implemented. Depending on the circumstances, the Service's Office of Law Enforcement may exercise enforcement discretion.	This is precisely why Lighthouse Wind takes so seriously it's adherence to the USFWS Guidelines and Eagle Conservation Plan Guidance.
48	Stilwel, D. (USFWS)	48.9	Although preliminary acoustic data indicate that NLEB is not found in the Project area during the summer, the Commenter notes that the NLEB may migrate through the Project area during the spring and fall and operating wind turbines are known to kill and injure migrating bats. Commenter notes that Lighthouse Wind has indicated that it will wait to review the final NLEB 4(d) rule before deciding a course of action relative to potential take of NLEB during migration. (Final 4(d) rule is out)	The commenter is correct. Lighthouse Wind will submit final reports to USFWS to coordinate compliance per the Endangered Species Act and with regard to compliance with other federal laws or regulatory protections of other wildlife resources.
48	Stilwel, D. (USFWS)	48.10	If the Project proceeds, the Service recommends that the site be monitored for impacts to wildlife following construction and during turbine operation. A post-construction bat and bird mortality monitoring plan should be developed and provided for review. Proposals for conducting monitoring should be coordinated with both the Service and the NYSDEC to ensure they are comprehensive, accurate, and correctly timed. Monitoring should also be part of a strong adaptive management program for the Project. We recommend that project approval not be given until after the details of the post-construction monitoring plan and adaptive management program have been reviewed and approved by the Service and NYSDEC.	Lighthouse Wind will prepare a Bird and Bat Conservation Strategy that addresses, among other things, the Tier 4a studies (as per the Wind Energy Guidelines) to be completed to evaluate effects. The BBCS will also outline adaptive management responses to be implemented in the event unforeseen impacts occur that are considered significant.
49	Wolanyk, E.	49.36	Regarding PSS Section 2.7.5.2 on page 54, Commenter states that acknowledging that unavoidable impacts are expected with birds that are endangered or threatened or even in the migratory pathway of bats, songbirds, raptors and waterfowl and only monitoring those impacts on bird and bat fatality is unacceptable. Commenter believes this statement indicates that this area (home to bald eagles, Northern Long-eared bat, short-eared owl, Cooper's hawk, Sharp-skinned hawk, Northern Harrier, Osprey, Red-shouldered Hawk, common night hawk, re-headed woodpecker, and numerous song-birds) is not a suitable location for this industrial wind turbine complex to be built.  Commenter feels the lack of plans to mitigate those impacts is disturbing, and believes plans will only be developed after birds and bats have been killed, which is unacceptable. Additionally, commenter states, across the United States where these industrial wind turbines are placed, bird and bat mortality figures are not publically monitored or scientifically researched and the wind energy industry prevents that research from being conducted. Commenter would like to know how Lighthouse Wind will guarantee to New York State and the residents of these communities that this information will be gathered and that any attempts to reduce these fatalities will be implemented. Commenter asks what Lighthouse Wind plans to reduce this impact and how Lighthouse Wind will deal with federal charges if bald eagles are killed. Commenter believes before a single turbine is built Lighthouse Wind should be able to guarantee that birds and bats will not be harmed.	Lighthouse Wind takes seriously its commitment to develop projects in compliance with governing regulations and adheres closely to the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies. It is Lighthouse Wind's intent that if "incidental take", of threatened or endangered species, or eagles, is anticipated, that it will be authorized and mitigated in accordance with the provisions of the ESA or BGEPA in advance of its occurrence, should it be likely to occur.
51	Kahn, A. (Rochester Birding Association)	51.1	Commenter cites the PSS which states that the Project site was selected because, of its "potential for avoidance and/or minimization of significant environmental impacts." Commenter disagrees with that statement because the Project site is located within an internationally recognized bird migration route, and the commenter believes the environmental impact to birds and bats could be substantial.	Siting and design, as well as operational protocols will be developed in response to site specific studies of the Project site, which will allow it to be operated in a manner that avoids or minimizes impacts. The south shore of Lake Ontario does funnel migrants at certain times of the year, and in certain conditions (flight heights, weather patterns, etc.), some of these species may be at risk of colliding with turbines; therefore, this issue will be evaluated carefully in Exhibit 22 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.2	Commenter requests that multi-year evaluations be conducted if a proposed turbine location is found to have particular sensitivity to bird and bat activity such as the proposed Project site. Commenter believes that the scopes of studies proposed by Lighthouse Wind are minimal and lack information.	A second year of avian studies was initiated in January 2016 to evaluate annual variation and improve understanding of seasonal bird use. One year of bat studies are complete, and a second year has not been recommended at this time.

**Lighthouse Wind Project Case No. 14-F-0485**

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
51	Kahn, A. (Rochester Birding Association)	51.3	Commenter notes PSS Section 2.7.2.2 Wildlife and Wildlife Habitat Page 50- and the Bat and Bird Survey Appendices 3-1 Pages 14 and 15 should compare to published records from Buffalo and Braddock Bay raptor flights which are recorded daily from March to end of May and have been for 25 +years.	Evaluations of spring and fall raptor migration have been completed and preliminary analyses indicate substantially lower raptor use than Braddock Bay during similar survey periods. These results will be considered and discussed in detail in Exhibit 22 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.4	Commenter asks for a survey for neotropical migrating passerine birds. Commenter notes that raptors will be observed twice a week but asks how will smaller birds be observed at the same time by the same person? Commenter feels that 8AM to 5PM misses the majority of passerine flight and movement. Commenter suggests that dawn and dusk at a minimum should be included in sight observations. Commenter feels that the Protocol is not clear. Commenter suggests that Lighthouse Wind use protocol from TNC/Audubon migratory stopover site 2012 study which takes into account disturbance by human observers.	Appendix A of the Study Plan discussed the small bird surveys, in which small birds seen or heard within 100m of the avian survey plots are recorded. This, coupled with the morning breeding bird surveys, evaluate presence of neotropical migrants (in particular during the breeding season when neotropical migrants would be present for extended periods and potentially at higher risk, and during the migration period when they are passing through from the north or south). The breeding bird surveys are completed in the identified time (30 mins prior to sunrise up to approximately 10:30AM). And, the small bird and breeding bird studies are based on NYSDEC and USFWS guidelines and comments provided by each agency.
51	Kahn, A. (Rochester Birding Association)	51.5	Commenter states that weather, wind and mist all make a large difference in bird migration, Lighthouse Wind studies do not include nocturnal radar studies or surveys using sonar nor do they extend the studies during inclement weather (overcast and windy), both times when birds may come to the ground or fly at heights that could place them at elevated risk. Commenter requests that Lighthouse Wind assess the impact of the Project on migratory birds and bats that fly north toward Lake Ontario, and then turn east and follow the lakeshore, flying parallel to the shore. Commenter also requests that Lighthouse Wind include an analysis of how nocturnal migrants that drop from the sky at dawn to find resting and feeding areas which include woodland, wetlands, stream corridors, pastures, crop fields and the lake shoreline. Commenter asks how these behaviors would put birds in the path of turbine rotors, increasing risk of collision.	This comment is noted and will be considered and discussed in Exhibit 22 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.6	Commenter states that fall migration is important for neotropical passerine birds and should be conducted more than once a week.	The study plan has been developed in coordination with the USFWS and NYSDEC. Results will be evaluated and discussed in Exhibit 22 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.7	Commenter cites Bat and Bird Survey Appendices, Page 23 Breeding Bird - and states that twice a month for a total of 10 minutes is not sufficient for small birds. Commenter suggests that a marsh monitoring protocol calls for 15 minute observation. Commenter states that increasing to once a week during daytime only during migration is not sufficient for passerines.	The avian study plan was developed in coordination with USFWS and NYSDEC. Impacts to marsh habitats are generally avoided or minimized through Project design and monitoring protocols were not requested by the agencies.
51	Kahn, A. (Rochester Birding Association)	51.8	Commenter cites Bat and Bird Survey Appendices , Page 23 Breeding Bird - Commenter states that five minutes is a minimal sample time and 10 to 15 minutes is a more typical survey time but, at least 5 minutes of silence before starting is needed to reduce the disturbance impact of a human observer. Commenter also indicates that night time and dawn and dusk radar and sonar would give a more accurate representation.	The duration of a breeding bird survey is intrinsically linked to the objective of the survey, and methodology used is the subject of research and debate. The North American Breeding Bird Survey administered by the USGS (and Canadian Wildlife Service) uses 3 minute counts to monitor bird populations across North America and inform researchers of changes in bird population levels. The 5 minute count was deemed appropriate by the USFWS and NYSDEC for this assessment of species composition and abundance and population trends on the Project site. Likewise, use of dawn/dusk radar and sonar are techniques that can be employed to accomplish specific study objectives. These were not recommended by the agencies at the Project site.
51	Kahn, A. (Rochester Birding Association)	51.9	Commenter believes that one survey year is not sufficient to document the temporal and spatial variation of wildlife use in the Project site. Commenter states that forest, shrub and riparian habitats are important and should be surveyed as well.	A second year of avian studies was initiated in January 2016 to evaluate annual variation and improve understanding of seasonal bird use. The study plan is designed to sample representative habitats located onsite.
51	Kahn, A. (Rochester Birding Association)	51.10	Commenter asks that Lighthouse Wind assess potential Project impacts on owl species, including breeding and migratory species.	The owl species of concern to the NYSDEC (short-eared owl and snowy owl) are assessed in the Winter Grassland Raptor Survey. Raptor nests surveys, which would include assessment of breeding owls, were not requested by the agencies.
51	Kahn, A. (Rochester Birding Association)	51.11	Commenter suggests that migratory bird surveys include information on the altitude of migrating species. Commenter asks that Lighthouse Wind consider the height of towers and turbine blade swept areas in relation to both clear and cloudy weather flight altitudes in order to evaluate whether specific areas are sensitive.	The bird studies completed for the Project to date do assess flight height and these topics will be addressed in Exhibit 22 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.12	Commenter asks that Lighthouse Wind evaluate Project impacts on grassland birds. Commenter states that the Project site was designated by an Audubon New York/ DEC study as Focus Area 1 because the majority of target grassland species breed in the vicinity.	Grassland habitats are sampled for breeding, migrating and wintering birds per the avian study plan. These surveys are designed to assess this concern, as well as many other questions.
51	Kahn, A. (Rochester Birding Association)	51.13	Commenter points out that an active bald eagle nest has been observed in the Project site. Commenter asks Lighthouse Wind to evaluate impacts on nesting bald eagles in and near the Project site. Commenter notes that bald eagles are no longer federally-listed under the Endangered Species Act; however, bald eagles, along with their foraging and winter roosting habitat, remain protected pursuant to the Bald and Golden Eagle Protection Act. Commenter states that any "take" and/or disturbance of bald and golden eagles is strictly prohibited under this Act.	Surveys are being completed in accordance with the USFWS Eagle Conservation Plan Guidance to evaluate potential impacts to eagles.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
51	Kahn, A. (Rochester Birding Association)	51.14	Commenter requests that when evaluating impacts on raptors: Lighthouse Wind collects at least three years of pre-construction study data for projects where landscape features, natural history patterns or other data suggest raptor concentration is possible. Commenter also requests that pre-construction studies of raptor behavior to include migration issues, risk associated with direct turbine strikes, possible avoidance behavior, terrestrial habitat degradation and its effects on nesting, migrating, and wintering raptors.	Studies will be completed in accordance with agency guidelines to evaluate and respond to risk. Several of the issues identified by the commenter will be addressed in Exhibit 22 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.15	Commenter states that the federally listed northern long ear bat is a summer tree roosting and breeding species known to hibernate 22 miles south of the Project site and can range 40 miles from wintering caves to find suitable brooding trees. Commenter notes that Lighthouse Wind has only two AnaBat recorders placed on one artificial tower. Commenter also notes that there are no specifics of what mist net and acoustical studies are planned for the wooded tracks of land in the Project site. Commenter feels that SonoBat is considered better than AnaBat at discerning between species and suggests a full spectrum SonoBat protocol combined with active mist surveys be conducted.	Surveys to evaluate potential breeding presence of northern long-eared bats were completed in accordance with USFWS protocol requirements to assess presence or probable absence, and probable absence was confirmed. Bat activity surveys are also completed to assess peaks in migratory activity of listed and non-listed bats.
53	D'Anna, W.	53.1	The commenter, a longtime member of several ornithological and birding organizations, explains his concern for the welfare of birds that use and migrate through the area. The commenter discusses factors which impact raptor migration. He expresses that raptor studies completed for the Project were only conducted on a part-time basis, so significant migration days could have been missed and that yearly changes in the number of migrants also makes accurate predictions impossible.	Lighthouse Wind takes seriously its commitment to develop projects in compliance with governing regulations and adheres closely to the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
53	D'Anna, W.	53.2	The commenter discusses songbird and other migrants through the Project site, discussing that these birds have the potential to cross the Project site several times (flying at night, returning to land at dawn, and when flying parallel to the lake during the day).	Lighthouse Wind takes seriously its commitment to develop projects in compliance with governing regulations and adheres closely to the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
53	D'Anna, W.	53.3	Commenter states that if this Project is allowed to proceed, raptors, songbirds, and other species will be killed by wind turbines. Commenter notes at some wind farms, hundreds of raptors have been killed, including many golden eagles, one of many species that migrates through the Lake Ontario plain. In addition wind farms have also killed many songbirds, including hundreds of Lapland longspurs in one night at one site. Commenter feels that even with the possible steps taken that would reduce the number of collisions with wind turbines, the unpredictable nature of birds and weather make it impossible to eliminate them. Commenter is concerned with large-scale mortality events where weather and migration combine to bring many birds through the wind turbine area in a short period of time.	Lighthouse Wind takes seriously its commitment to develop projects in compliance with governing regulations and adheres closely to the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
56	Bronson, C.	56.3	Commenter states that wetlands serve as flood control, act in filtration of contaminants and contribute to aquifer recharge, control soil erosion, supporting vegetation and species that are adapted to living in wet environments, providing habitat and food sources for indigent and transient wildlife. Commenter notes that the wetlands along the Lake Ontario shoreline in the Project site provide for nature study, bird watching, and wildlife conservation. Commenter asks how Lighthouse Wind will ensure the preservation of wetlands that line the shore and inland, as the Project will potentially impact wetlands. (Commenter attached a map)	Wetlands and waterbodies will be field delineated and mapped as described in PSS Section 2.7.3.3. Potential avoidance and minimization measures are discussed in PSS Section 2.7.4.3. Any unavoidable wetland impacts will be presented in the Certificate Application and any necessary mitigation measures will be developed in coordination with the NYSDEC and USACE during the permitting process, as appropriate.
64	Summers, J. (Genesee Valley Audubon Society)	64.1	Commenter notes that wind projects should not be sited along the southern shore of Lake Ontario as this is a migratory corridor for birds and bats and these species would be adversely impacted by wind projects.	Lighthouse Wind takes seriously its commitment to develop projects in compliance with governing regulations and adheres closely to the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
64	Summers, J. (Genesee Valley Audubon Society)	64.2	Commenter notes that the PSS bird and bat plan is comprehensive but short sighted. Commenter notes that any survey less than 3 years in length is insufficient, "Bird and bat migrations are effected by the weather, at least three years of data is needed to give a true picture of what happens during both seasons of migration."	Lighthouse Wind takes seriously its commitment to develop projects in compliance with governing regulations and adheres closely to the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
68	Bane-Dinse, K.	68.5	Commenter states that the U.S. Fish and Wildlife Service says, "As more industrial wind facilities are built and turbine size increases, the cumulative effects of this rapidly growing industry may initiate or contribute to the decline of some wildlife populations and loss of their habitats. The potential harm to these populations from this potential additional source of mortality and habitat loss makes careful evaluation of proposed facilities essential."	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
76	Herriwen, B. and G.	76.1	Letter references the NYSDEC Bald Eagle Program and notes it is taxpayer funded to promote and protect habitat. The letter states eagles' nest, feed, and migrate in the Towns of Somerset and Yates and questions why DEC would spend time, money, and human resources to protect the Bald Eagle when PSC would give permission for wind turbines that will cause deadly collisions.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.5	Commenter notes the public record reveals a unanimous sentiment that the Project poses a serious threat to birds and bats along the Lake Ontario Shoreline. The commenter references several documents from the USFWS, NYSDEC, Genesee Valley Audubon Society, Rochester Birding Association, and American Bird Conservancy (Exhibits 1-6 attached to the letter) noting concerns raised by others. The commenter references expert opinions on the Avian and Bat Study Plan by W. Evans and B. Ewald (Letter IDs 24 and 40 respectively). The commenter concludes that the Project would have a negative impact on avian migration and populations and that there are deficiencies in the PSS and Avian and Bat Study Plan. Commenter suggests Lighthouse Wind withdraw its application and relocate to an area further from the lake shore. Commenter states that the southern shore of Lake Ontario will never be an appropriate location for large scale industrial wind development.	Lighthouse finds the commenter's conclusions premature. Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
95	Vacco, D. (Town of Somerset)	95.37	Commenter cites Section 2. 7 Terrestrial Ecology and Wetlands of the PSS and the comments of Brett Ewald and William Evans, (Letter IDs 24 and 40). Commenter believes that the PSS fails to address the potential impact of the Project on migrating birds.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
95	Vacco, D. (Town of Somerset)	95.E1.1	USFWS Letter dated 5/6/2015. <b><i>(Incorporated in Letter ID 48)</i></b>	Exhibit noted.
95	Vacco, D. (Town of Somerset)	95.E2.1	Commenter refers to email correspondence obtained through FOIL request by the Town of Somerset between DEC staff regarding alleged specific comments made by Genesee Valley Audubon Society, Hawk Migration Association of North America, Federation of Monroe County Environmentalists (FMCE) and USFWS. The comments are all in regards to avian activity in the area and potential impacts. No questions in regards to the PSS or project Application are raised.	Comment noted.
95	Vacco, D. (Town of Somerset)	95.E4.1	Commenter cites Genesee Valley Audubon Society letter dated 6/11/2015. Commenter states that the letter and supportive enclosures identify the Project site as located within a critical migratory corridor for raptors and small migratory song birds. Commenter also states that the letter concludes that the area is not a suitable region for large industrial wind turbine facilities and development of wind turbines along the south shore of Lake Ontario is not advised, as the commenter believes impacts to birds and wildlife will be too high for New York State.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
95	Vacco, D. (Town of Somerset)	95.E5.1	Commenter cites Rochester Birding Association letter dated 10/29/2015. Commenter states that the letter summarizes the potential impacts of the Project on bird populations. The main points of the RBA letter are:-Requests multi-year evaluations be conducted if a proposed location is found to have particular sensitivity to bird and bat activity in the proposed Project site.-States that the southern shore of Lake Ontario is an internationally recognized major migratory route for birds, and is also important migratory, breeding, and wintering habitat for grassland birds.-States that the Project site overlaps with Audubon NY grassland bird breeding focus areas.-Indicates that the Project overlaps with known and important migratory stopover areas along the lakeshore for small neotropical migratory birds.-States that due to a potential concentration on Lake Ontario of migrating raptors and other birds, as well as nesting eagles and other birds of conservation concern, industrial wind turbine projects may not be appropriate at this site.- Suggests a six mile setback from the south shore of Lake Ontario.-Requests Project abandonment if multi-year pre-construction studies confirm migration, wintering or breeding season concentrations of raptors in a particular area.-Suggests that post-construction monitoring could potentially demonstrate that the entire project or individual turbines to be potentially fatal to raptors and if so, requests project suspension.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies. Although the situation described by the commenter is unlikely, the Monitoring Plan and Adaptive Management Plan would be specifically designed to detect and respond to events like this should they occur.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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96	Kremer, K. (Save Ontario Shores, Inc.)	96.8	<p>Commenter cites PSS Section 2.7.5 and states the Project would sit on one of the Great Lakes; on the south shore of Lake Ontario where there currently are no cities that abut the lake shore. Commenter believes that the Project would represent the only "city" abutting the shoreline in the migration corridor. Commenter states that Lighthouse Wind did not clarify the extent of existing information about the avian presence and activity in this area and did not list one potential mitigation possibility for the region.</p> <p>Commenter believes that the only mitigation with a migration area like the south shore of Lake Ontario involves proper siting. Commenter requests that the turbines not be placed in the migration corridor. Commenter cites a USFWS which suggested that industrial turbines should not be placed within three miles of the Great Lakes shoreline. Commenter cites a second document by The Nature Conservancy, which the commenter claims has done extensive studies in areas that include the Project site, concluded that the setback from the shore of the Great Lakes should be six miles in the fall migration season due to expanded stopovers by migrating birds.</p> <p>Commenter states that the recommended setbacks are a result of studies conducted across the Great Lakes that show the ecological importance of these shoreline regions. Commenter notes that migrating bird and raptors throughout the spring months and again into the fall draw a significant number of people to the region annually and have become part of the quality of life for residents of the Towns of Somerset and Yates. Commenter states that the shores of Lake Ontario host many species and also many that migrate through the region and therefore, the potential loss of habitat, altering migration patterns and wildlife deaths would have an impact far beyond the region.</p>	<p>Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. As of this date the USFWS has noted the findings of their radar study and has agreed to work through the process outlined in these guidance documents to inform development. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies. Although the situation described by the commenter is unlikely, the Monitoring Plan and Adaptive Management Plan would be specifically designed to detect and respond to events like this should USFWS have not stated that this Project must not be placed in the migration corridor.</p>
96	Kremer, K. (Save Ontario Shores, Inc.)	96.9	<p>Commenter believes technology and shutting down the turbines will not sufficiently reduce the risk of severe bird mortality because of the location on the south shore of Lake Ontario. Commenter remarks that birds are not flying overhead at 5-700 feet as they do in inland Texas, but are landing, taking off, resting, nesting, and preparing for travel. Commenter states birds do not simply fly across the lake but they often reach the shoreline and fly along it during the night and then land along the shores with first light. Commenter claims these specific issues, although known, as well as the resulting needs for mitigation were not listed in the PSS.</p>	<p>The current body of scientific research on this subject does not support the commenter's position that birds landing or taking off are generally vulnerable to greater risk than other birds; however, Lighthouse Wind is conducting extensive study to evaluate the baseline conditions at the Project site, understand the timing and associated weather conditions of migration as described, and to develop operational protocols, monitoring and response plans to address such concerns.</p>
96	Kremer, K. (Save Ontario Shores, Inc.)	96.10	<p>Commenter states that there is existing data regarding birds and bats and raptors in this area but, none of this information was included in the PSS. Commenter adds that there is no reference to any of the local groups who wrote letters to the PSC and that their concerns have not been mentioned or discussed in the PSS, nor has their data been referenced. Commenter requests that Lighthouse Wind speak with the authors of those letters and the leaders in the local groups and national organizations including Rochester Birding Association, North American Hawk Association, Rochester Nature Conservancy, Genesee Valley Audubon and the American Bird Conservancy.</p>	<p>The PSS document is a scoping tool meant to establish methodology, scope of studies, or program of studies to be conducted in support of a Certificate Application. Lighthouse Wind believes it has provided the type of information that is required for a PSS during the Pre-Application phase of the Article 10 process. The Certificate Application will provide more details and specifics in regards to wildlife. Additionally, Lighthouse Wind is addressing all comments submitted during the comment period on the PSS, as per Article 10 procedures. Additionally, the Project PIP allows for continual public involvement in the Article 10 process.</p>
97	Wasilewski, T.	97.1	<p>Commenter states Lighthouse Wind must be required hire independent environmental consultants and not industry go to wind industry consultants like Ecology and Environment Inc. (E&amp;E) which prepared Lighthouse Wind's Appendix B- Avian and Bat Study Plan. Commenter state the Department of Public Service must take into consideration the formal comments provided by the U.S. Fish and Wildlife Service for this Project which recommended that no industrial wind turbines proposed for this Project be built with three miles or more of the Lake Ontario shoreline because of the danger to migrating birds and bats and the wildlife habitat. Commenter requests Lighthouse Wind address the radar and acoustic studies of birds and bats that the USFWS prepared for near and in the Project area. Commenter believes Lighthouse Wind is ignoring the dangers of this Project to the environment of Lake Ontario.</p>	<p>The Bird and Bat Study Plan was prepared in coordination with USFWS and NYSDEC. USFWS has not specifically requested that this Project be sited greater than 3 miles from Lake Ontario as the commenter suggests but, notes that they have made this recommendation for previous projects near the shoreline of the Great Lakes. In the letter to Lighthouse Wind, USFWS requests that Lighthouse Wind continue to meet and discuss data to be collected in the future. Lighthouse Wind continues to work through the process outlined in the USFWS Wind Energy Guidelines with both NYSDEC and USFWS to evaluate and respond to risk appropriately and provide them information to make recommendations once studies are complete. Coordination with the agencies that manage these resources is a fundamental aspect of Lighthouse Wind's development approach.</p>
97	Wasilewski, T.	97.2	<p>Commenter requests that Lighthouse Wind thoroughly address the formal and informal comments by the USFWS, HMANA and Braddock Bay Research Center and others on this Project. Commenter believes that these comments show how important bird and bat migration is in the proposed Project site and how important the habitat is to these migrating and resident wildlife. Commenter notes displeasure with Lighthouse Wind's "self-serving" studies. Commenter cites PSS Section 2.7 Terrestrial Ecology and Wetlands and Appendix B. Commenter provides background on what they believe to be a "history" of other Apex Clean Energy sponsored projects proposed in important bird migration flyways. Commenter claims that Apex Clean Energy proposed to build a wind project along the Gulf of Mexico but, the Baldwin County, Alabama County Commissioners voted unanimously against the Project citing the environmental importance of the area to birds and bats and the impacts to the tourist industry. Commenter believes Apex Clean Energy did not care about siting a project in an important environmental area plus the effect it would have on the tourism industry. Commenter states that Lighthouse Wind has ignored those issues on this Project as well as the wishes of the citizens of the Towns of Somerset and Yates as indicated in official surveys of public opinion in those two Towns.</p>	<p>The Commenters point that Lighthouse Wind is ignoring environmental concerns with "self-serving" studies discounts the merit and credibility of this comment. Lighthouse Wind is working closely with USFWS and NYSDEC in accordance with agency requested processes. Similarly, the comment regarding Apex Clean Energy's activity in Baldwin County, Alabama is also a misrepresentation of the facts. We evaluated a project in this area and elected not to pursue it for a variety of reasons, none of which include the information presented by the Commenter.</p>

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Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
97	Wasilewski, T.	97.3	Commenter is concerned about other projects that supposedly Apex Clean Energy pursued and their potential impacts on bird species and tourism.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
97	Wasilewski, T.	97.9	Commenter is concerned about the potential for avoidance and minimization of impacts.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
99	Hermann-Kokis, M.	99.1	Commenter expresses the southern shore of Lake Ontario is internationally recognized important migratory pathway for birds and that the proposed location for the Project would be extremely destructive to migrating birds.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.7	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7, commenter states that the text of the PSS describes cover types in general terms, e.g., "Agricultural land comprises approximately 68 percent (16,440 acres) of the Project site." Commenter believes that this level of detail is too general for any meaningful assessment of potential adverse impacts on vegetative types at each turbine site, and throughout the entire study area as a cumulative effect.	The purpose of the PSS is not to provide an impact analysis of the Project. A detailed inventory of cover types will be prepared and included in the Certificate Application as described in the PSS. This information will be used to support the impact analysis also to be contained in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.8	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter suggests that a vegetation map should also be a habitat map, which shows areas to be removed or disturbed by project activities (sec. 1001.22(b)).	The analysis and map specified in Sec. 1001.22(b) of the Article 10 regulations will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.9	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter indicates that a NYNHP letter is a necessary piece of information, but feels that it is insufficient in determining the presence or absence of plants or animals of concern. Commenter states that it identifies species that have been documented in an area but, it is based only on available information and many places have not been surveyed for species of conservation concern, and that additional species may be present pending site specific field studies.  Commenter suggests determining whether plants or wildlife species of conservation concern may be present, and subject to adverse impacts, additional information on species that may be present should be used to design site specific plant and wildlife surveys and identify the appropriate seasonal timing and conditions for maximizing survey success. Commenter recognizes the sources of information listed as examples in sec. 1001.22(d) of the Article 10 regulations and adds that the New York State Wildlife Action Plan, with its information on species of greatest conservation need and their habitats, is an important reference.	Lighthouse Wind has reviewed a variety of existing information as an initial screen (i.e., in accordance with the USFWS WEGs). This information, along with coordination with USFWS and NYSDEC was used to develop site specific surveys of sensitive resources warranting more detailed evaluation. These surveys will be discussed in detail in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.10	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding the Hartland Swamp WMA, the commenter asks if the swamp is hydrologically connected to other water resources within the study area. Commenter also asks if Project construction and infrastructure would affect the hydrology of this swamp or its water quality.	Hydrological connection and potential impacts to the Hartland Swamp WMA will be assessed during wetland and stream delineations and included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.11	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter suggests additional significant habitat may be present in the study area. Commenter requests that information contained in the NYS Wildlife Action plan as well as field habitat surveys and species of conservation concern that may be present should be used to further assess potential adverse impacts-- especially on tributaries to Lake Ontario.	Lighthouse Wind has coordinated with USFWS and NYSDEC to develop site specific surveys of sensitive resources. These surveys will be discussed in detail in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.12	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter request that all terrestrial, wetland and aquatic habitats should be displayed on a map of the study area plant communities. Commenter cites Article 10 regulations (16 NYCRR sec. 1001.4(m)) which require aerial photographs of all properties within the study area.	Mapping of terrestrial, wetland, and aquatic habitats will be contained in the Certificate Application per the Article 10 regulations (16 NYCRR sec. 1001.4(m)).

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.13	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks how "vicinity" is defined in terms of bat species ranges. Commenter cites that the USFWS letter dated May 6, 2015 notes that the northern long-eared bat, listed as federally and state threatened, is known to hibernate in mines 22 miles south of the study area. Commenter adds that bats range from hibernation areas; adverse impacts to species may occur throughout this range and that migratory tree bats may be adversely affected during migration. Commenter notes that the Eastern red bat, hoary bat, and silver-haired bat all have been found within the region and that adverse impacts to their migration patterns, and all habitats that support these bats (e.g. foraging and roosting areas) all must be assessed as described in sec. 1001.22(h)(1).	All of these points are important considerations that are evaluated via site specific bat studies and will be presented in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.14	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Commenter requests that each bird species of conservation concern that breed in habitats within or adjacent to the study area, or migrates through this area, should be evaluated in terms of potential impacts to breeding habitat, food, and behavior. Impacts on each migratory species of conservation concern should be provided.  Commenter requests that the following items be addressed specifically in the PSS (sec. 1000.5(2) (ii)) and incorporated into the impact analysis: <ul style="list-style-type: none"> <li>• Migrating birds associated with woody cover and in patches of woody cover close to Lake Ontario.</li> <li>• Migrating birds concentrated in isolated patches near urban areas and agricultural areas, parks and other small "islands" of habitat close to Lake Ontario.</li> <li>• Migrating birds that are concentrated around the Finger Lakes and large wetland complexes like Iroquois-Tonawanda-Oak Orchard and Montezuma Wetlands Complexes.</li> </ul> Commenter makes a general statement that while both location and habitat matter, birds are using almost the entire landscape in the Lake Ontario region.	Lighthouse Wind has developed a bird and bat study plan in coordination with the USFWS and NYSDEC to evaluate and respond as to the potential risk to protected birds species and those that are of special concern. These findings will be addressed in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.15	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Commenter states that the NYS Wildlife Action plan lists the following amphibians and reptiles of conservation concern that may be found in the area: (a) threatened or endangered: Queen snake, Blanding's turtle, Timber rattlesnake; (b) special concern: Spiny softshell turtle, Wood turtle, Spotted turtle, Blue-spotted salamander, Jefferson salamander; (c) species of greatest conservation need: Four-toed salamander, Western chorus frog, Eastern ribbon snake, Common mudpuppy, Smooth green snake. Commenter states that potential adverse impacts on these species and their habitats should be evaluated as noted in sec. 1001.22(f) of the Article 10 regulations. Commenter notes that vernal pool breeding amphibians may be vulnerable to habitat changes. Commenter requests that the PSS include an assessment of all vernal pools within the study area, with analysis of their value to breeding amphibians according to scientifically defined protocol (methodology should be followed as described in: Calhoun, Aram and Michael W. Klemens. Best Development Practices: Conserving Poolbreeding Amphibians in Residential and Commercial Developments in the Northeastern United States. MCA Technical Paper No.5. Bronx, NY: Wildlife Conservation Society, 2002.). Commenter indicates that these surveys are season-dependent, and should be conducted during the breeding season in early spring.	Lighthouse Wind has reviewed a variety of existing information as an initial screen (i.e., in accordance with the USFWS WEGs). This information, along with coordination with USFWS and NYSDEC was used to develop site specific surveys of sensitive resources warranting more detailed evaluation. Initial screening indicated that the spotted turtle (State Species of Special Concern) may exist within the Project site. Field surveys will determine if state or federal listed threatened or endangered species, or species of special concern, are present in the Project site. The results of these field surveys will be discussed in the Certificate Application. Site specific surveys for amphibians and/or an assessment of vernal pools within the Project site are not proposed and have not been requested by the NYSDEC or USFWS.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.16	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Commenter suggests that Table 4 be expanded to include a broader list of species (as noted in sec. 1001.22(f)), including bird, reptile and amphibian species. Commenter requests that further field surveys be conducted to determine presence/location of suitable habitat in the study area for those additional species. Commenter suggests that these field surveys be designed to locate specific species which will be seasonal and habitat-specific. Commenter states that the PSS should describe a plan for identifying habitat used by these species, quality of that habitat, and the species that are likely to use it. Commenter adds that any additional surveys to confirm the presence of species of special concern must conform to specific timing, seasonal, weather or other conditions depending on species. Commenter states that in the absence of such field studies and evidence it must be assumed that if good quality habitat that meets a species' needs and is within a species' range is present, the species is likely to be present as well.	Lighthouse Wind has reviewed a variety of existing information as an initial screen (i.e., in accordance with the USFWS WEGs). This information, along with coordination with USFWS and NYSDEC was used to develop site specific surveys of sensitive resources warranting more detailed evaluation. The results of these field surveys will be discussed in detail in the Certificate Application. However, site specific surveys for amphibians and/or an assessment of vernal pools within the Project site are not proposed and have not been requested by the NYSDEC or USFWS.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.17	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Commenter states that since there is federal and state information concerning the importance of biodiversity, and concern regarding the effects of biodiversity declines on human communities, the commenter requests that the PSS include a section on biodiversity and an evaluation of potential adverse impacts to the study area's diversity of species.	The requested information and analysis is beyond the scope and intent of the Article 10 regulations. Lighthouse Wind feels the information required by Sections 1001.22 and 1001.23 is sufficient to evaluate the potential impacts on terrestrial and aquatic ecology.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.18	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Regarding 2.7.1.3, commenter states that existing wetland resources are not complete and must be field verified, including identifying and surveying vernal pools. Commenter requests wetlands are mapped within the study area regardless of their regulatory status, and included in all review of habitats and associated species of conservation concern throughout this study (sec. 1001.22(d)).	Wetlands and waterbodies will be field delineated and mapped as described in PSS Section 2.7.3.3. Vernal pool surveys are not proposed by Lighthouse Wind and are not required per Article 10 regulations. In addition, vernal pools are not regulated by the USACE or NYSDEC unless connected by a significant nexus to a state or federally jurisdictional wetland or stream.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.19	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Regarding PSS Section 2.7.2, commenter asks for the definition of "temporary" impacts. Commenter states that some impacts indicated as "temporary" may actually incur adverse habitat impacts that may be significant. Commenter adds that clearing and grading activities compact soils and change drainage patterns, which in turn affect plant species. Commenter notes that replacing a community of native species with a different community (that may include non-native species) may be a significant adverse impact.	Temporary impacts are those impacts that last only a relatively short period of time or throughout construction activities. Lighthouse Wind concedes that temporary impacts are by no means insignificant and thus mitigation measures and best management practices during construction will help to avoid or mitigate such impacts. Strict management practices will be followed for grading activities to prevent compaction. Drainage patterns will be protected through the use of decompaction activities, erosion and sedimentation control devices, and similar practices. An invasive species control plan will also be developed for the Project to help prevent the spread of non-native species. Further details on the avoidance or mitigation of these impacts will be provided throughout the Article 10 Application, including within Exhibits 21, 22, and 23.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.20	Hickory Creek Consulting (Karen Schneller-McDonald) attachment. Regarding PSS Section 2.7.2, commenter asks Lighthouse Wind to identify specific BMPs so they can be evaluated for their effectiveness onsite. Commenter asks how will mitigation occur and how will it protect sensitive species? What are the habitat implications of changing plant community composition when disturbed sites are restored? How does this affect wildlife species of conservation concern? Commenter suggests that this should be included in impact analysis.	The requested information and analysis will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.21	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.2, commenter notes that this section has unsupported assumptions and conclusions and generalizations which need more specific information on impacts and impacts, including discussing specific species and their habitat sensitivity, specific BMP and mitigation measures, if specific activities are correlated with specific habitats and impacts, nature of alterations to habitat and why is it minor, other impacts to bats than physical injury (breeding, feeding, migration behavior), data from additional wind farms, and cumulative impact assessment.	Specifics regarding these issues will be in response to analysis of impacts and will be presented in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.22	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.2, commenter states indirect impacts, and changes in hydroperiod, drainage patterns, and wetland buffers have not been considered in the PSS but may be locally significant. "Temporary" impacts should be described to provide evidence regarding their significance. The presence of adequate vegetated buffers that are at least 100 feet wide provides water quality protection for wetlands. Impacts to this buffer zone may result in adverse impacts on wetlands. Similarly, impacts from construction activities can be mitigated by protecting that 100 foot buffer. This should be described in the PSS. As habitat, different types of wetlands are subject to adverse indirect and other impacts from project activities and should be evaluated as such (sec. 1001.22(f)). Wetlands should receive the same level of assessment of indirect and other impacts as provided for other habitat types. Temporary and permanent impacts on wetlands may have similar effects in the field, depending on site conditions. The PSS should include an evaluation of wetland habitat.	Wetland habitats and temporary impacts to wetlands will be discussed in greater detail and identified within wetland delineations to be conducted for the Project and within Exhibit 22 of the Certificate Application. Compliance with State, Federal, and local wetland rules and regulations, including regulated wetland buffers, will be addressed in the Certificate Application. Compliance with conducting delineations for state protected wetlands and their regulated 100 foot adjacent areas is anticipated, as is stated in the PSS.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.23	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.3, commenter requests evaluation of plant communities according to their use as wildlife habitat, particularly for species of conservation concern.	Evaluation of plant communities according to their use as wildlife habitat will occur after field studies described in the PSS are completed. This information will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.24	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.3, commenter states impacts on plant and animal species of conservation concern should be evaluated in the context of their terrestrial, aquatic, and wetland habitats. Aerial data is not specific enough for this; field investigations will also be needed.	As stated in PSS Section 2.7.3, field investigations will be conducted and the results of those incorporated into the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.25	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.3, commenter states additional information includes: 1. Expand the species habitat surveys to include all NYS species of Special Concern, those listed as High Priority Species of Greatest Conservation Need, and Species of Greatest Conservation Need (as identified in the New York State Wildlife Action Plan). 2. Include habitat surveys for all reptiles and amphibians similarly identified as threatened, endangered, special concern, or species of greatest conservation need. 3. Evaluate wetlands, small tributaries and streams for habitat for aquatic species of greatest conservation need. Many roads crisscrossing the landscape can affect water resources and the species they support.	Lighthouse Wind has reviewed a variety of existing information as an initial screen (i.e., in accordance with the FWS WEGs). This information, along with coordination with USFWS and NYSDEC was used to develop site specific surveys of sensitive resources warranting more detailed evaluation. Additionally, wetlands and waterbodies will be field delineated and mapped as described in PSS Section 2.7.3.3. The results of these field surveys will be discussed in detail in the Certificate Application. However, site specific surveys for reptiles or amphibians within the Project site are not proposed and have not been requested by the NYSDEC or USFWS..

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.26	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.3, the commenter states delineations should be conducted within 500 feet of the outer edge of all areas of disturbance (sec. 1001.22(i)) to adequately identify potentially affected wetlands and habitat. Because of the importance of habitat and watershed interconnections, hydrological connections between groundwater, streams, and wetlands, delineations should include small wetlands and vernal pools as well as intermittent streams. The wetland delineation report should identify wetland habitat and its significance as well as wetland buffer condition and wetland hydroperiod. Project impacts including vegetation removal within wetland buffers (at a minimum 100 feet from the delineated edge of the wetland) should be identified and evaluated for significance.</p> <p>The PSS statement that "the data in this report will be sufficient to calculate all temporary and permanent impacts of the Project on wetlands and their regulated adjacent areas..." is premature assumption, and is not based on evidence. Whether or not it proves to be true depends on (1) the quality of the completed wetland report, (2) whether the report contains adequate information for all wetlands and buffer areas, regardless of regulatory status, and (3) the functional evaluation of all wetlands in the study area as habitat and as important components of watersheds, influencing water quality and supply.</p>	Wetland and waterbody delineations will comply with Article 10 regulations (section 1001.22(i)) and will be conducted as described in Section 2.7.3.3 of the PSS. The Certificate Application will include an assessment of the delineated wetlands and an impact analysis.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.27	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.4 and 2.7.5, commenter believes statements about impacts and mitigation in these sections are premature because all the data about existing site characteristic and adverse impacts has not yet been compiled and evaluated. Additional impacts that have not yet been identified may require additional mitigation.</p>	Impact analysis and appropriate mitigation measures based on the results of field studies conducted and determination of a Project layout will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.28	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.4 and 2.7.5, commenter notes plant communities are also habitat. Evaluate habitat impacts from the use of herbicides and other biocides (post construction maintenance). Impacts from the removal of plants that are critical for the survival of certain animal species (e.g., milkweed which is essential for monarch butterflies) should also be evaluated. Additional mitigation measures may be required for effective protection of these habitats. The issue of weed control must take into account the impact of herbicides on native wildlife species, water quality and habitat.</p>	The potential for the use of herbicides during post construction maintenance activities and implementation of restrictions to protect wetlands, waterbodies, groundwater, and sensitive habitats will be evaluated and presented in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.29	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.4 and 2.7.5, commenter states the subsequent general list will need to be changed as necessary to reflect the data compiled about wildlife and habitats in the study area and the identification of additional adverse impacts. Additional measures (such as limiting use of biocides) may be required for certain species, like pool breeding amphibians. Therefore this list is only preliminary and its final items may include actions designed to protect particular species. A post-construction avian and bat fatality monitoring program as described is necessary but it is not mitigation. The point of mitigation is to reduce impacts (like bird and bat mortality) before they occur. A plan for the mitigation of potential effects should be in place before turbines are operational, and include a plan for adjusting operation time, blade speed, etc. if necessary to reduce mortality during certain times of the year, or certain times of the day or night.</p>	The requested information and analysis will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.30	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.7.4 and 2.7.5, commenter states the PSS includes a premature conclusion based on assumptions rather than evidence. "The maximum extent possible" does not convey any information about the details of impact mitigation. Further minimization of impacts to wetlands and their 100-foot buffers (at a minimum) may include other items in addition to those listed, depending on site specific information and wetland and wildlife data. Adverse impact may ensue if disturbed areas are not returned to pre-disturbance conditions and species.</p>	Additional avoidance and minimization measures will be considered in coordination with the NYSDEC and USACE based on site-specific information obtained from field studies and will be included in the Certificate Application. Site restoration protocols will also be included in Exhibit 29 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.39	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests all terrestrial, wetland and aquatic habitats be displayed on a map of the study area.</p>	The requested information and analysis will be included in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.42	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for description of wetland buffer zones and the actions that will be required to preserve their functions in areas impacted by this Project.</p>	The 100-foot adjacent areas applicable to state protected wetlands and all proposed wetland avoidance, minimization and mitigation measures will be addressed and presented in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.43	<p>Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Based on information from other wind projects, assess how large-scale wind projects affect natural resources, to provide a context for proposed avoidance and mitigation measures. Consider whether potential impacts extend beyond the study area.</p>	The Certificate Application will include an impact assessment based on construction and operation of the proposed Project. All proposed avoidance, minimization and mitigation measures will be presented in the Certificate Application based on the impact assessment.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.44	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for an expansion of Table 4 to include all species of conservation concern (which includes threatened, endangered, special concern, SGCN wildlife, rare plants) that may be present in the study area at some season or stage of their life cycle. Determine whether suitable habitat exists, and design subsequent surveys for target species.	All protected species such as rare, threatened and endangered species and NYS species of special concern that are determined to be potentially affected by the proposed Project will be evaluated and presented in a detailed discussion in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.45	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for an expansion of the bird species habitat surveys to include all NYS species of Special Concern as well as those listed as High Priority Species of Greatest Conservation Need, at a minimum; Species of Greatest Conservation Need should also be evaluated in terms of potential project impacts to breeding habitat, resting areas, food and behavior.	All protected species such as rare, threatened and endangered species and NYS species of special concern that are determined to be potentially affected by the proposed Project will be evaluated and presented in a detailed discussion in the Certificate Application. To the extent that either the USFWS or the NYSDEC has concerns of other species that Lighthouse Wind has not identified, then Lighthouse Wind will consult with the agencies to develop a specific plan to address their concerns.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.46	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests Lighthouse Wind conducts a survey of vernal pools and survey of pool-breeding amphibians throughout the study area. This is season-dependent and must be conducted during early spring.	Wetlands and waterbodies will be field delineated and mapped as described in the PSS Section 2.7.3.3. Site specific surveys for amphibians and vernal pools within the Project site are not proposed and have not been requested by either the NYSDEC or USFWS.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.47	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests Lighthouse Wind conducts habitat surveys for all reptiles and amphibians similarly identified as threatened, endangered, special concern, or species of greatest conservation need.	Site specific surveys for amphibians and vernal pools within the Project site are not proposed and have not been requested by either the NYSDEC or USFWS. To the extent that either the USFWS or the NYSDEC has concerns of other species that Lighthouse Wind has not identified, then Lighthouse Wind will consult with the agencies to develop a specific plan to address their concerns.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.48	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests Lighthouse Wind produces a list of aquatic species of conservation concern; the NYS Wildlife Action plan lists more than 25 fish, odonates, and freshwater bivalve species of greatest conservation need in the southwest Lake Ontario area. Identify habitats in the study area that are suitable and may support aquatic species of greatest conservation need.	Lighthouse Wind has reviewed a variety of existing information as an initial screen (i.e., in accordance with the FWS WEGs). This information, along with coordination with USFWS and NYSDEC was used to develop site specific surveys of sensitive resources warranting more detailed evaluation. All State and Federally protected aquatic species identified within the Project site and any potential impacts to those protected aquatic species will be discussed in Exhibit 23 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.49	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for description of the area's biodiversity (including habitats and species), and evaluate any adverse impacts to the study area's biodiversity.	The requested information and analysis is beyond the scope and intent of the Article 10 regulations. Lighthouse Wind feels the information required by Sections 1001.22 and 1001.23 is sufficient to evaluate the potential impacts on terrestrial and aquatic ecology.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.50	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests evaluation of cumulative adverse impacts on birds and bats. Refer to the list of birds of conservation concern and to the three species of tree bats found in the area; evaluate impacts on behavior (breeding and migration), and the consequences of fatalities in terms of species, not just groups like "passerines." Wind farms have cumulative effects, both within (add up the effects from all turbines) and beyond the study area.	Lighthouse Wind adheres to the process outlined in the USFWS Wind Energy Guidelines and Eagle Conservation Plan Guidance and coordinates closely with USFWS and NYSDEC to inform project development, construction and operation activities. Studies developed in coordination with the USFWS and NYSDEC are being completed to assess baseline conditions, inform risk and monitoring and adaptive management strategies.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.51	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter states bat monitoring should be conducted at representative sites throughout the study area that have been identified as most likely to support bat activity, and be conducted for a minimum of three years to account for annual variations in weather, food sources, etc.	Lighthouse Wind has completed two types of bat studies that will provide the information requested by the commenter in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.52	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for assessment of the cumulative impacts of bat loss due to the combined mortality from White Nose Syndrome and wind turbine fatalities and Lighthouse Wind discuss the impact on agriculture and ecosystems.	Two types of bat studies have been completed that will provide information regarding this comment, and the impacts of the Project will be discussed in the context of WNS as appropriate in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.53	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests assessment of the impacts of this Project on the three species of tree bats, and include cumulative impact assessment across the region.	Lighthouse Wind has completed two types of bat studies that will provide the information requested by the commenter in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.54	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for a description of the cumulative impacts of bat mortality on terrestrial and wetland ecosystems due to a combination of death of cave bats from white-nose syndrome, and wind turbine fatalities for tree bats.	Lighthouse Wind has completed two types of bat studies that will provide the information requested by the commenter in Exhibit 22 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.55	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter asks for a description of bat species ranges, for both tree bats and cave bats, and adverse impact throughout these ranges. The USFWS letter dated May 6, 2015 notes that the northern long-eared bat (federal and state listed as threatened) is known to hibernate in mines 22 miles south of the study area. Bats range from hibernation areas; adverse impacts to species may occur throughout this range. In addition, migratory tree bats may be adversely affected during migration. The Eastern red bat, Hoary bat, and Silver-haired bat all have been found within the region. Address adverse impacts to their survival, migration patterns, foraging and roosting areas.	Surveys to evaluate potential breeding presence of northern long-eared bats were completed in accordance with USFWS protocol requirements to assess presence or probable absence, and probable absence was confirmed. Bat activity surveys are also completed to assess peaks in migratory activity of listed and non-listed bats. This topic will be discussed in detail in Exhibit 22 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.56	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests evaluation of the cumulative amount of disturbed habitat relative to the amount of undisturbed habitat in the region. Estimate the amount of background bird mortality due to tall towers, large numbers of wires, busy roads, E.coli in Lake Ontario. Identify other development projects that may attract birds to this area, and other regional projects that are affecting migratory birds in the Project corridor/area, including other wind farms.	The scope of the requested evaluation by the commenter extends beyond the scope of the requirements of Article 10 regulations; however, impacts to birds and bats and other species of concern will be addressed in detail in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.57	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests identification of migration routes, resting spots, and stopovers. Evaluate the existing biological data obtained from monitoring and other studies, to discuss probable degree of avian mortality. Assess bird movement patterns between nearby significant habitat directly south of the proposed Lighthouse Wind project, lies the Iroquois National Wildlife Refuge, and Tonawanda and Oak Orchard Wildlife Management Areas which provides waterfowl and other birds an important migratory pathway and resting area. Since the Project would lie between these areas and Lake Ontario, identify the impacts of the Project on birds moving between them.	Avian studies developed in coordination with USFWS and NYSDEC are being implemented to evaluate bird use and risk associated within the Project site.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.58	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter states the Niagara Escarpment is a significant migration corridor-orienting feature along its length from New York State to Ontario to Wisconsin. Of special concern is the Lake Ontario shoreline in New York. The Niagara Escarpment runs in close proximity to the shoreline, and resting areas for migratory birds lie between, including the proposed Project location. Evaluate the impacts on migratory birds in light of this topographic feature.	Avian studies developed in coordination with USFWS and NYSDEC are being implemented to evaluate bird use and risk associated within the Project site.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.59	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests implementation of pre-construction monitoring and research to determine if there are other factors such as landforms, habitat features, and bird behaviors that increase collision risk at each turbine site.	Avian studies developed in coordination with USFWS and NYSDEC are being implemented to evaluate bird use and risk associated within the Project site. Spatial use of the Project and thus any association with habitat features, will be evaluated and discussed in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.60	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests identification of the cumulative impacts of the loss of birds in terms of their value to ecosystems and ecological benefits to human communities.	The scope of this requested evaluation by the commenter extends beyond the scope of the requirements of the Article 10 regulations; however, impacts to birds and bats and other species of concern will be addressed in detail in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.61	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests an assessment of the cumulative impact of bird take permits regionally.	Should the need for permits authorizing the "take" of birds be required for the Project, the cumulative effect would be part of the analysis required by the issuing agency. Studies and subsequent agency coordination are planned to evaluate the need for such a permit.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.62	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter states breeding bird and migratory bird surveys should be conducted for a minimum of three years to account for annual variations due to weather and environmental conditions. Therefore, one survey year is not sufficient to document the variation of wildlife use in a variety of locations throughout the study area over time.	Studies have been developed in coordination with the agencies. A second year of avian study is currently being implemented.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.63	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests an assessment of project impacts on owl species, including breeding and migratory species.	Assessment of owls is a component of the avian study plan developed in coordination with USFWS and NYSDEC. Impacts will be evaluated and discussed in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.64	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests an assessment of the impact of the Project on migratory birds and bats that fly north toward Lake Ontario, and then turn east and follow the lakeshore, flying parallel to the shore. Include an analysis of nocturnal migrants that drop from the sky at dawn to find resting and feeding areas. These areas include woodland, wetlands, stream corridors, pastures, crop fields. And the lake shoreline. How would these behaviors put birds in the path of turbine rotors, increasing risk of collision?	Assessment of migratory birds is a component of the avian study plan developed in coordination with USFWS and NYSDEC. Impacts will be evaluated and discussed in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.65	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter states migratory bird surveys must include information on the altitude of migrating species. Height of towers and turbine blade swept areas should be considered in relation to both normal clear as well as cloudy weather flight altitudes in order to evaluate whether specific areas are sensitive.	Assessment of migratory birds is a component of the avian study plan developed in coordination with USFWS and NYSDEC. Impacts will be evaluated and discussed in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.66	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: 28. Evaluate project impacts on grassland birds. The study region was designated by an Audubon New York/ DEC study as Focus Area 1 because the majority of target grassland species breed in the area.	Assessment of grassland birds is a component of the avian study plan developed in coordination with USFWS and NYSDEC. Impacts will be evaluated and discussed in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.67	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests evaluation of impacts on nesting Bald Eagles in and near the study area.	Assessment of bald eagles is a component of the avian study plan developed in coordination with USFWS and NYSDEC. Impacts will be evaluated and discussed in the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.68	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Comment notes for evaluating impacts on raptors: collect at least three years of pre-construction study data for projects where landscape features, natural history patterns or other data suggest raptor concentration is possible. Pre-construction studies of raptor behavior need to include migration issues, risk of turbine collisions and mortality, possible avoidance behavior, habitat degradation and its effects on nesting, migrating, and wintering raptors.	Studies have been developed in coordination with the agencies to evaluate raptors. A second year of avian study is currently being implemented.
102	Behnke, H. (DPS)	102.86	Expansion of the Project Area since the avian study plan was adopted results in areas with habitat conditions not included in surveys, including significantly different nearby habitat (swamp and State Wildlife Management Area) that was formerly nearly two miles south of the original Project Area now being less than one mile from the Project Area (see 16 NYCRR 1001.22(h)(1)).	Studies of representative habitats within the Project are designed to characterize the communities affected by the Project and include species likely to occur in this expansion area. Lighthouse Wind is working closely with USFWS and NYSDEC to evaluate risk to bird species.
103	Edick, R (NYSDEC)	103.7	In regards to PSS Section 2.7.1.2.1, commenter notes since the spread of white-nose syndrome, caused by the fungus <i>Pseudogymnoascus destructans</i> began in 2006, the number of little brown bats ( <i>Myotis lucifugus</i> ) in New York has decreased drastically, and the species is no longer common throughout the state.	Comment noted.
103	Edick, R (NYSDEC)	103.8	Regarding PSS Section 2.7.1.2.5, commenter notes that the section states that bald eagles are "reported as occurring year round in the vicinity of the Project site." In April 2015, DEC confirmed an active eagle nest within the Project boundary, and this information was conveyed to Lighthouse Wind on June 3, 2015. Similarly, DEC confirmed occurrences of short-eared owl (state-listed endangered species) and northern harrier (state-listed threatened species) within the Project boundary during the winter of 2014-2015, and this information was conveyed to Lighthouse Wind.	These findings are consistent with studies being completed for the Project in accordance with NYSDEC and USFWS recommendations. Continued coordination with the agencies regarding response to findings is planned throughout development and operation of the Project.
103	Edick, R (NYSDEC)	103.9	Regarding PSS Section 2.7.1.2.5, commenter notes the section states that "during field surveys, biologists will determine if state or federally listed threatened or endangered species are present in the Project area, or could be affected by the construction or operation of the Project." Is Lighthouse Wind planning on conducting surveys for species other than birds and bats? If not, how will the presence or absence of sensitive amphibians, reptiles, turtles or other animal guilds be established?	Lighthouse Wind intends to complete all surveys required by NYSDEC to assess species of concern that are likely to occur onsite and be affected by the Project.
103	Edick, R (NYSDEC)	103.10	Regarding PSS Section 2.7.2.1.1, commenter states when discussing permanent and temporary impacts to vegetation, it should be clarified that all clearing of forested areas is considered a permanent impact. Even if left to regenerate after construction, previously forested areas will take years,	In areas where tree clearing is proposed and the operation of the Project results in permanent forest conversion - conversion defined as the permanent change to a non-forested vegetative community, then this conversion would be considered a permanent impact for the purposes of the impact analysis in the Certificate Application.

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103	Edick, R (NYSDEC)	103.11	<p>Commenter states an acceptable invasive species plan must detail survey methods to identify currently existing invasive species listed in DEC regulations found at 6 New York Code Rules and Regulations (NYCRR) Part 575 in the Project area so that these areas can be avoided when possible and proper measures can be taken when they cannot. The plan must specify how imported fill will be free of invasive species to the extent practicable, how fill leaving the site will be free of invasive species to the extent practicable, and how fill within the site will either be free of invasive species or only used within the area infested with the same invasive species. The plan must also address how site grading and erosion and sediment control will work together to prevent invasions. It should also address cleaning procedures for removing invasive species from equipment, preferably with a power-washer and personnel, location of designated equipment cleaning stations, location of off-site disposal (if the material is not rendered incapable of growth or reproduction) which must be either a landfill, incinerator or State-approved disposal facility. The intent is that equipment should arrive at the site clean and leave clean. Equipment and clothing-cleaning stations must be constructed so that invasive species seeds and other viable plant parts cannot escape in runoff or through other means.</p> <p>The plan should describe the Best Management Practices or procedures that will be implemented to ensure that project activities do not result in introduction or spread of invasive species, especially in or near regulated areas of special interest to Natural Resources staff such as areas containing protected species or habitats within the Project area. The plan should also provide measures for educating workers about invasive species and how to prevent their spread, identify work areas which will trigger cleaning activities (such as prior to using mats in streams and wetland and wetland adjacent areas) and identify methods to prevent and control the transport of invasive species as well as how to clean equipment and clothing using acceptable methods. The plan must list all planting and seeding materials to be used and specify mulch free of invasive species.</p> <p>The plan should also detail post-construction monitoring and survey approaches, preferably for at least 5 years which would ensure that the objective of no net increase in invasive species was accomplished. If areal coverage of invasive species in the ROW Project area increases over the baseline survey level remedial action should be considered, with consultation with DEC and USAGE. If the goals of the invasive species control plan are not met within five years post-construction, a revised control plan containing additional control actions for an additional monitoring term will be submitted.</p>	<p>The Certificate Application will include an Invasive Species Prevention and Management Plan that addresses the species listed in 6 New York Code Rules and Regulations (NYCRR) Part 575. Lighthouse Wind recognizes this is an important consideration to agricultural lands, as well as other natural areas that may potentially be disturbed.</p>
103	Edick, R (NYSDEC)	103.12	<p>Given the extent of disturbance and that the site contains forest, a careful examination of habitat fragmentation should be included that would span not only birds and bats, but plants and other animal species. The Project should be designed in such a fashion as to minimize habitat fragmentation. These measures could include placing access roads along forest edges and collocating facility infrastructure as much as possible.</p>	<p>Project design will minimize habitat fragmentation by utilizing forest edges for the routing of access roads and co-location of components to the maximum extent practicable. A discussion on the siting of Project components will be included in the Certificate Application.</p>
103	Edick, R (NYSDEC)	103.13	<p>In regards to PSS Section 2.7.2.2.2, commenter states this section should include a more specific discussion of expected and potential impacts to birds and bats at this site. The lakeshore location may elevate the collision risk to nocturnal migrants. There may be direct and indirect impacts to grassland-dependent birds, including state listed species that have been documented on site. The potential for federally threatened northern long-eared bat to be impacted by this Project should also be discussed.</p>	<p>Assessment of migratory birds, including nocturnal migrants and bats, are a component of the avian study plan developed in coordination with USFWS and NYSDEC. Impacts to these species will be evaluated and discussed in the Certificate Application.</p>
103	Edick, R (NYSDEC)	103.14	<p>Commenter states based on review of the Project boundary, there is potential for DEC regulated wetlands to be impacted by the Project. However, since the DEC has not been given the opportunity to review the Project's wetland delineation study and the exact locations of the turbines have not yet been identified, more detail regarding the Project layout in relation to delineated wetlands is necessary to determine, with certainty, if the Project would directly impact DEC regulated wetlands, 100 ft. adjacent areas and streams.</p>	<p>Once a layout is developed, wetland delineations will proceed as described in the PSS. Project facilities will be microsited to avoid and minimize impacts to the maximum extent practicable and anticipated impacts to State regulated wetlands will be presented in the Certificate Application.</p>
103	Edick, R (NYSDEC)	103.15	<p>Regarding PSS Section 2.7.3.2, Commenter notes this section states that the results of on-going field surveys "will be sufficient to identify and evaluate expected impacts to birds and bats, analyze known or predicted species and species migration corridors present, determine effective impact avoidance, (and) minimization and mitigation measures". DEC does not wholly concur with this statement, and would like to clarify that until the location of turbines, access roads, collection lines, transmission lines, and all other Project components are known, and all bird and bat study reports have been received and reviewed, the agency reserves the right to request further field studies or changes in Project Layout if study results indicate adverse impacts to listed or sensitive species are likely as a result of construction and operation of the Project.</p> <p>Additionally, a post-construction wildlife monitoring plan should be in place prior to the start of project operation.</p>	<p>Lighthouse Wind agrees with this comment and regrets that the statement was unclear. Study reports will be submitted, additional studies completed as recommended by NYSDEC, and all results evaluated to a) inform siting of Project features and b) to evaluate impacts of the resulting layout. A post-construction monitoring plan will be prepared in response to study findings.</p>

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
103	Edick, R (NYSDEC)	103.16	Regarding PSS Section 2.7.4.2, DEC recommends all turbines and other Project components are located outside of the fields and other habitats known to be occupied by the short-eared owl, northern harrier, and bald eagle. The statement that "Project components will be sited to minimize impacts on wildlife to the maximum extent practicable" cannot be evaluated at this time, as no information has been provided to DEC on the layout of the Project.	Lighthouse Wind is evaluating all environmental and regulatory constraints in siting wind turbines including the use of open fields to avoid and minimize potential impacts to all environmental resources. A Project layout will be presented and evaluated in the Certificate Application.
103	Edick, R (NYSDEC)	103.17	A request to DEC's Natural Heritage Program for information on the potential occurrences of listed and sensitive species and natural communities in or near the Project area should be made, and a response received dated within the past 12 months.  If construction or operation of the Project will result in an impact to federal or state-listed endangered or threatened species, the Project must conform to the requirements of ECL Article 11. Since the locations of the turbines have not been identified to date, further work will be necessary to determine if ECL Article 11 requirements are applicable.  Also, to determine ECL Article 11 applicability, specific information should be provided regarding the time frame, number, and types of surveys conducted for DEC review.	Lighthouse Wind stated in the PSS that a NHP review request was submitted on September 11, 2015 and that a response was provided on October 1, 2015. Lighthouse Wind will continue to provide updated requests and coordinate with NYSDEC to ensure adequate information is provided for these determinations.
103	Edick, R (NYSDEC)	103.18	PSS Section 2.7.5.2 Proposed Measure to Mitigate Unavoidable Impacts-Wildlife and Wildlife Habitat Developing and implementing a post-construction fatality monitoring program is not considered mitigation for unavoidable impacts, as it can only monitor impacts. In addition to fatality monitoring, the post-construction plan should also include bird displacement/habituation surveys. Lighthouse Wind should consider such measures as operational curtailment during certain times of year and under certain conditions to reduce direct mortality of bats, as well as strike deterrents and detectors deployed on turbines.	In addition to monitoring impacts in accordance with NYSDEC requirements, measures to avoid and minimize impacts will be implemented, and impacts will be mitigated and/or permitted as appropriate.
103	Edick, R (NYSDEC)	103.19	Regarding PSS Appendix B, commenter states this document should be updated to indicate that winter grassland raptor surveys will occur until March 2016, and will be extended until April 2016 if any listed species are observed on last survey in March.  DEC requests a mid-season summary report be submitted in early February 2016 on the winter raptor survey results to date. A final report discussing the results of the entire 2015-2016 winter survey season should be submitted after completion in April 2016. This report should contain all locations, time, and duration of observations, flights paths, and behaviors of all listed species encountered.	The Avian and Bat Study Plan update and mid-season report are being prepared and will be provided as requested. The Final Report will be submitted once data collection is complete.
106	Howe, J. (The Nature Conservancy)	106.1	Commenter states it is vitally important to proceed in a way that does not endanger the unique and valuable natural resources that could be impacted by energy infrastructure. Effective planning for a new energy future will require "Smart from the Start" practices to guide energy development that avoids or minimizes adverse impacts on wildlife and high-value natural resources. The New York State Energy Research Development Authority (NYSERDA) has funded tools that will enable New York to take this approach. For instance, a wind energy siting tool recently developed by The Nature Conservancy and NYSERDA provides the first comprehensive assessment of New York's natural resources in the context of wind turbine suitability and provides a method for balancing renewable wind development and natural resource protection at a landscape scale.	Lighthouse Wind has used the wind energy siting tool in siting this Project. The tools modeling output indicates the potential presence of protected resources in and near the Project, but also shows substantial area within the Project with no sensitive resource concerns likely to occur. Lighthouse Wind is completing site-specific studies which will evaluate/verify the modeling results and inform decisions regarding compatibility of the Project location with the sensitive resources in and near the site.
106	Howe, J. (The Nature Conservancy)	106.2	Commenter discusses specific research conducted by the Nature Conservancy along the southern Lake Ontario shoreline, demonstrating the importance of shoreline stopover sites to migratory raptors and land-birds, which fly at night and descend as dawn approaches to rest and feed. The commenter states construction of infrastructure along this shoreline could have consequences far beyond Western New York.  Commenter also references a recent synthesis of scientific information on the interactions of migrating birds and bats with Great Lakes shorelines (Ewert, et al 2011) <sup>3</sup> provided a number of guidelines for placement and operation of wind energy developments in proximity to a coast. These guidelines recommend that wind towers be constructed no closer than 5 miles from a Great Lakes shore and turbines be feathered during peak migration periods and under certain weather conditions.  Commenter states it is vitally important that evaluation of the LWP proposal include thorough, site-specific consideration of the potential impacts to migratory birds, and the steps necessary to minimize such impacts. This evaluation will be inadequate without continuous tracking, through at least one spring and one fall migration season, of nocturnal movements of birds, including the altitudes of birds as they descend at dawn and ascend at dusk to continue migration.	The Nature Conservancy's recommendation of a 5 mile buffer setback is based on bird density and predictive habitat modeling. The Nature Conservancy's (France et al., 2012) study concludes that their modeling indicates that Great Lakes coastal zones are important stopover habitat, as are some inland areas, however, they are evaluating parameters of bird use (richness, abundance) and landscape/habitat variables as predictors of use. They are not evaluating wind project siting by any means in their study. The authors specifically point out that when evaluating threats to existing available habitat that on the ground assessments of habitat quality be used, and specifically caution that remotely sensed data and their own models are coarse, and that fine-scale interpretation and use should be done with caution. The commenter's jump from bird presence (species richness and abundance) and proximity to lakeshore equals bad siting is not supported by the facts. Evidence from operating Texas Gulf Projects, as well as many projects with migratory concentrations of birds (such as Appalachian ridgeline projects) and lakeshore/coastal areas suggest that the Project can operate responsibly, with minimal impacts to migrating birds, and that monitoring to evaluate the effectiveness of operating protocols is appropriate.

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106	Howe, J. (The Nature Conservancy)	106.3	Ideally, monitoring of nocturnal movements during two spring and two fall migration seasons would account for inter-annual variations in weather that affect the distribution of migrants. The Avian and Bat Study Plan submitted by Ecology and Environment on behalf of the proposed LWP does not include any examination of nocturnal movements by migrating songbirds and other land-birds, and thus will not provide an adequate analysis of the impacts of the proposed Project.	A second year of data collection was requested for winter grassland raptors and may be recommended by the agencies for other species.
106	Howe, J. (The Nature Conservancy)	106.4	Commenter calls attention to the earlier comments on the Preliminary Scoping Document submitted by William R. Evans, and the comments submitted directly to Lighthouse Wind by David Stilwell of the US Fish and Wildlife Service.	Comment noted.
108	Ragan, C.	108.1	Commenter expresses her opinion that this Project could be one of the worst killers of birds since DDT. She notes that siting wind turbines in the direct flyway of migrating birds shows such a disregard for wildlife that have been using this route for eons.	Commenter's concerns are being evaluated in accordance with NYSDEC and USFWS guidelines and agency coordination.
111	Jarvis, C.	111.16	In regards to PSS Section 2.7.1.1, commenter asks if forested areas will be protected.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As discussed in Section 2.7.4 of the PSS, Lighthouse Wind will strive to minimize the size of areas where vegetation will be temporarily and permanently removed (such as forested areas) and will restore areas of temporarily disturbed vegetation as soon as possible after construction activities are completed. As the Project layout is developed for the Project, additional information will be provided in the Certificate Application regarding potential and appropriate mitigation measures specific to the impacts identified in the Certificate Application.
DMM14	Shaw, J.	DMM14.1	Commenter is concerned the Project will cause significant habit disruption and cause birds to leave the area.	Commenter's concerns are being evaluated in accordance with NYSDEC and USFWS guidelines and agency coordination.
DMM19	Greenberg, J.	DMM19.1	Commenter states that Lighthouse Wind cites some relevant documents such as federal Breeding Bird Surveys and the state Breeding Bird Atlas. However, they do not seem to mention other sources that may be relevant such as eBird reports for the area, state January Waterfowl Counts, and Christmas Bird Counts. Also, there doesn't seem to be any provision for recording reports of wildlife from concerned citizens as opposed to the consultants hired by the company.	Lighthouse Wind utilizes eBird reports as a data source in early stage siting analyses as to review for the potential presence of special status bird species. Lighthouse Wind also uses Christmas Bird Counts when they overlap an area of siting consideration. Currently there is no mechanism for recording reports from concerned citizens. While these additional data sources are helpful in early screening, the site-specific studies and analyses completed by qualified consultants are designed to evaluate presence and inform risk assessments for the Project. These systematic surveys are developed in coordination with NYSDEC and USFWS and will be used for preparation of Exhibit 22 of the Certificate Application.
DMM19	Greenberg, J.	DMM19.2	The commenter notes that the small bird surveys would be carried out for a total of two hours per month and claims this is minimal. Large birds would be counted for an additional 20 minutes twice per month, except eagles which would be counted for an hour. It is not explained why other large birds would not be counted after 20 minutes, and this seems like a flaw in the methodology.	This protocol is considered appropriate to assess the bird community and the approach was developed in coordination with NYSDEC and USFWS. Small bird surveys are generally completed for a brief sampling period to avoid repeat counting of the same individuals.
DMM19	Greenberg, J.	DMM19.3	The commenter states the bird and bat surveys were apparently completed in December 2015, but the timing of this PSS is such that the results were not included. Commenter hopes that this situation is not an attempt at a cover-up and that there will be abundant opportunity for the public to comment on the results.	As field surveys are completed, data are analyzed and reported. This process takes time, and reports will be made available to the agencies as they are completed. Exhibit 22 of the Certificate Application will fully address the bird and bat survey results.
DMM28	Pitcher, M.	DMM28.1	Commenter expresses turbines will have a negative impact on wildlife in the air and on the underground habitat. Commenter states that turbines are a danger to birds flying in the area, noting there have been many documented instances of birds killed by moving blades. Commenter states not enough studies have been conducted to clearly identify the dangers to all of the wildlife in the vicinity of the turbines. Commenter also questions if similar negative health effects on deer, raccoons and squirrels due to the noises the turbines create as people have experienced. Commenter hopes that studies are conducted to understand the full impact of this new technology. Commenter does not agree that no deer populations will be impacted.	Field surveys discussed in PSS Section 2.7.3 are designed to characterize the communities affected by the Project and include species likely to occur in the Project site. Lighthouse Wind is working closely with USFWS and NYSDEC to evaluate risk to wildlife species for inclusion in the Certificate Application. Although deer and other common species may be temporarily displaced during construction activities, it is anticipated that these species populations will not be adversely impacted by construction or operation of the Project.
DMM38	Rice, N.K.	DMM38.1	Commenter states the southern Lake Ontario shoreline is a vitally important setting for spring and fall migration of birds, such that people from all over this country come to the southern shoreline to observe these birds and contribute to the businesses of the shoreline communities. Commenter feels environmental impact studies that look at this issue and find ways to avoid the potential damage to our bird environment must be completed, while providing green energy. Commenter suggests the wind turbines could be sited farther south, away from the landing and takeoff spots for the birds. Commenter requests Lighthouse Wind ensures scientific study of this issue and find environmentally protective answers.	Environmental studies developed in coordination with USFWS and NYSDEC are in progress so that impacts will be avoided or minimized, and mitigated, if appropriate.
DMM46	Londergan, M.	DMM46.1	Commenter notes that the study/survey dates listed in the PSS have already passed and questions if this means that these studies were conducted without any input from the public or those with knowledge and specific concerns about protecting both migratory and resident birds.	Environmental studies completed to assess bird and bat use of the Project were developed in coordination with USFWS and NYSDEC. Comments received in the response to the PSS will be considered in subsequent studies to be completed for the Project.

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DMM46	Londergan, M.	DMM46.2	Commenter states they were concerned about avian issues when they first learned of the Project. Commenter called the NYSDEC and spoke to a member of the Division of Fish, Wildlife, & Marine Resources team with special knowledge of avian issues. Commenter asked about avian studies related to industrial wind turbine installations and was told that they should take up to three years due to environmental and weather changes that impact the presence and activity of birds at any time. Commenter finds it unconscionable and mystifying that the specific proposals for the various avian studies as stated in the PSS for the Lighthouse Wind Project are of such short duration with limited sampling.	The USFWS Wind Energy Guidelines recommend that the duration and intensity of studies needed to assess risk should be determined through communication with the USFWS, which Lighthouse Wind has prioritized to date. In addition, the avian and bat studies completed to date and studies still in progress are conducted in coordination with NYSDEC.
DMM46	Londergan, M.	DMM46.3	Commenter states the proposed Project site is along a major migratory flyway for both many birds as well as long-eared bats which are on the federal endangered species list. Commenter states the USFWS has recommended that industrial wind installations take place at least six miles from the shorelines where heavy avian migration occurs and agrees it is important to maintain this standard in order to protect the avian community which the commenter says is under many other environmental threats at this time.	Lighthouse Wind conducted surveys to assess presence of northern long-eared bat per agency protocols have been completed. The USFWS has made this recommendation on previous Projects, but for this Project they are working with Lighthouse Wind to study and evaluate risk at the Project site.
DMM46	Londergan, M.	DMM46.4	Commenter notes much of the data cited to substantiate avian study methods, standards and results is ten years old or older and is skeptical that they could be repeated today. Commenter expresses that new study guidelines should be used, established to guide studies for projects with the enormous environmental impact commenter claims the Lighthouse Wind Industrial Wind Turbine Project will have.	Studies were developed in 2015 in coordination with both the USFWS and NYSDEC. The appropriate studies that were outlined in the study Plan continue to this date.
DMM74	Markel, S.	DMM74.1	Commenter believes construction of dozens of 600 foot tall wind turbines along the lakeshore will inevitably change this beautiful, natural landscape into an industrial zone, chasing away the deer population that so many hunters rely upon to supplement their family larder.	There are no documented cases where deer populations have been permanently displaced due to an operating wind turbine or wind farm.
DMM79	Jarvis, C.	DMM79.1	Commenter is concerned about construction of 500-600 foot windmills within a major migratory bird flyway. Commenter indicates just to the south there are state and federal bird sanctuaries. Commenter states that if a few seagulls killed the Peace Bridge replacement project, then this Project should have been dead on arrival in Albany.	Environmental studies are being completed to assess bird and bat use of the Project in accordance with generally accepted guidelines for the industry, and the studies were developed in coordination with both the USFWS and NYSDEC.
DMM80	Doughty, K.	DMM80.3	Commenter is concerned about damage from Project to critical migratory corridor for wildlife.	Environmental studies are being completed to assess bird and bat use of the Project in accordance with generally accepted guidelines for the industry, and the studies were developed in coordination with both the USFWS and NYSDEC.
DMM81	Dudley, S.	DMM81.5	Commenter believes the Project will harm migrating birds along the lake shore and kill bats in the agricultural community.	Environmental studies are being completed to assess bird and bat use of the Project in accordance with generally accepted guidelines for the industry, and the studies were developed in coordination with both the USFWS and NYSDEC.
DMM82	Londergan, M.	DMM82.1	Commenter notes the document refers to "studies" of various sorts to be conducted to evaluate a variety of consequences of moving ahead with this Project. Commenter is particularly concerned with the studies of the Project's impact on birds and bats (migratory and non-migratory) in the Project area and states the duration of these studies is not adequate to realistically evaluate the effect on birds and bats. Commenter spoke with someone from the NYSDEC, who indicated reliable survey results would only be able to be obtained by at least a three year study. Commenter notes various factors including weather patterns significantly change migration patterns from year to year. Commenter states it is not prudent stewardship of the important migratory flyway in the Project area to approve this Project without appropriate studies.	Environmental studies are being completed to assess bird and bat use of the Project in accordance with generally accepted guidelines for the industry, and the studies were developed in coordination with both the USFWS and NYSDEC.
DMM82	Londergan, M.	DMM82.3	Commenter notes several endangered species live or migrate through the area, including long earned bats (endangered) and short-warred owls (endangered) and Bald Eagles only recently removed from the endangered list are common in the area. Commenter believes the incidental kill permits often granted for wind farm projects are not adequate. Commenter remarks that the Altamont project in CA, an early installation, has been shut down after controversy about the number of bird deaths there. ( <a href="http://www.contracostatimes.com/breaking-news/ci_29048836/altamont-pass-controversial-wind-turbine-company-shutting-down">http://www.contracostatimes.com/breaking-news/ci_29048836/altamont-pass-controversial-wind-turbine-company-shutting-down</a> )	Environmental studies are being completed to assess bird and bat use of the Project in accordance with generally accepted guidelines for the industry, and the studies were developed in coordination with both the USFWS and NYSDEC. Measures will be taken to ensure that endangered species or eagles are not affected, or that those impacts are authorized and mitigated as required by state and/or federal laws.
DMM92	Manning, L.	DMM92.2	Commenter indicates the construction of these turbines adversely affects resident and migratory bird populations, stating bird populations are endangered already by land degradation of stopover sites, use of pesticides in feeding areas and increased air pollution. Commenter mentions nesting herons as one of the species that use the area regularly for reproduction. Commenter believes the turbines are deadly for any species of bird found here.	Environmental studies are being completed to assess bird use of the Project in accordance with generally accepted guidelines for the industry, and in coordination with both the USFWS and NYSDEC to ensure responsible development and operation of the Project.
DMM98	Nellist, G.	DMM98.2	Commenter is concerned that wildlife and hunting will be nonexistent if these wind turbines are installed.	Access to land for hunting is at the discretion of the landowner and not something that the Project is likely to influence.
DMM102	Smith, D.	DMM102.1	Commenter is concerned about impacts to migratory birds and bats. States that he has nesting eagles and short-eared owls in/around his property and is worried about direct mortality from turbines and destruction of habitat during construction.	Lighthouse Wind is aware of one eagle nest within the Project site. The potential for impacts to eagles are being assessed using the processes outlined in the USFWS Eagle Conservation Plan Guidance and per input from both the NYSDEC and USFWS.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM128	Hellert, C.	DMM128.1	Commenter is opposed to the Project and concerned about impacts to bald eagles and migratory birds.	Environmental studies are being completed to assess eagles and migratory bird use of the Project site in accordance with generally accepted guidelines for the industry, and in coordination with both the USFWS and NYSDEC to ensure responsible development and operation of the Project.
DMM138	Smith, A. (SOS)	DMM138.1	Commenter is concerned about impacts to migratory birds and bald eagle.	Environmental studies are being completed to assess eagles and migratory bird use of the Project site in accordance with generally accepted guidelines for the industry, and in coordination with both the USFWS and NYSDEC to ensure responsible development and operation of the Project.
<b>Water Resources and Aquatic Ecology (PSS Section 2.8/Application Exhibit 23)</b>				
8	Smith, D.	8.1	Commenter questions the potential to induce erosion and sedimentation into Lake Ontario, and how that will affect the County of Orleans' drinking water (100% of which is taken from the lake). Commenter would like to know who will be responsible if illnesses that arise from contamination.	Information regarding impacts to public drinking water supplies will be provided in Exhibit 23 of the Certificate Application.
33	Bansbach, J.	33.1	Regarding PSS Section 2.8.2.1.1, commenter is concerned about the impact to ground water by excavation activities. Commenter provides information researched on a GE 1.5 MW turbine (total weight over 300 tons) indicating foundation depths of 6 to 30 feet deep. Commenter notes that 30 ft. deep and 30-50 ft. in diameter are not small holes. Commenter states that the proposed wind turbines are supposed to be much larger and would need a much deeper and broader foundation to support them, and therefore believes this could have a major impact on ground water.	The preliminary geotechnical studies that are proposed for the Project will be used to guide the engineering and design of the turbine foundation type and size. The preliminary geotechnical study will also identify any potential impacts to groundwater and the methods in which to avoid, minimize or mitigate those potential impacts. A more detailed discussion will be provided in Exhibit 23(a) of the Certificate Application.
36	Skinner, M.A & J	36.3	Another concern of the commenter that they state appears to go unaddressed in Section 2.8 is the matter of concrete slowly leaking its toxic chemicals into the ground water and therefore eventually into Lake Ontario. Each proposed concrete pad is enormous but mostly unseen under the surface of the land. There they will inevitably deteriorate and leach out chemicals which will at a minimum change the PH balance the ground water having an unnatural effect on the environment.	Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soil acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project site would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore, limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions.
46	Herstek, F.	46.6	Commenter notes in regards to requirements listed in Exhibit 22, sub paragraph (m), Lighthouse Wind disregards the impact, measured to Standard ASTM D4874, of leaching from subterranean wind turbine ferro-concrete bases into surface and subterranean water on stream and lake water quality and impact on fisheries. It is noted that the Lighthouse Wind decommissioning plan after twenty (20) years of use does not include removal of these bases imposing a long term environmental hazard without accountability.	Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soils acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project site would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions.  Removal of turbine foundations will be described in the Decommissioning Plan to be included in the Certificate Application. It is anticipated that turbine foundations will be removed to a depth of 4 feet.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
49	Wolanyk, E.	49.6	Commenter states the PSS claims that certain exhibits do not apply including Exhibit 38: Water Interconnection and Exhibit 39: Wastewater Interconnection. Commenter notes that while the industrial wind turbines will not use water to cool or operate, water will be impacted – the ground and surface waters. The massive foundations of concrete and rebar placed 30-50 feet into the ground for each turbine will alter the pH of water that transverses their surface or subsurface. The trenches dug for the underground power lines will alter the flow of ground water and it will follow the trenches, increasing the amount of ground water that will intersect the industrial wind turbine foundations and again raise the pH of the ground water that will ultimately enter streams and Lake Ontario. Nowhere in this proposal is this addressed.	Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soils acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project Area would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions.  Very localized changes to groundwater flow and regime are possible from the presence of the concrete foundations, as these are impermeable structures and flows would be forced to move around a foundation rather than allowed to run through. The presence of the concrete (impermeable surface) within the soil may also represent a reduction in groundwater storage within the soils that are displaced. The presence of the foundations may result in changes to surface runoff and infiltration of surface water within the footprint of the turbines. It is not anticipated that any of these very localized changes in groundwater would affect any groundwater receptors such as private and public water wells as setback requirements for turbines would help to protect these resources from any potential change in groundwater flow. Further information regarding Project potential impacts on groundwater will be provided in the Certificate Application.
49	Wolanyk, E.	49.17	Commenter asks what about the impact of trenching to lay power cables and its impact on the flow of ground water? What of the impact of thousands of tons of concrete impacting groundwater pH, local wells, and eventually streaming into the streams and Lake Ontario?	Potential impacts on groundwater will be discussed in greater detail in Exhibit 23 of the Certificate Application.  Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soils acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project Area would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions.
51	Kahn, A. (Rochester Birding Association)	51.18	Regarding PSS Section 2.8.1.3 on Page 57, the commenter notes there have been reports of the state protected Long-eared sunfish in Johnson Creek. There have been reports of the state protected rare pearly mussel species in Johnson and Marsh Creeks.	Initial consultations with the New York Natural Heritage Program have not indicated that any of the species mentioned occur, or may occur, on or immediately adjacent to the Project site. Lighthouse Wind appreciates the information provided by the commenter and will follow up the NYSNHP and NYSDEC regarding the potential for these species to occur on or near the Project site. Information regarding potential impacts to these species, if any, will be provided in Exhibit 23 (Water Resources and Aquatic Ecology) of the Certificate Application.
56	Bronson, C.	56.2	The commenter notes that two distinct strains of migratory rainbow trout called “steelhead” are stocked into Lake Ontario along this stretch of shoreline - Oak Orchard, Marsh, Johnson, Keg, and Eighteenmile Creeks. The commenter is interested to know what kinds of safeguards will be in place to keep these tributaries clean and/or unobstructed by the presence of either temporary or permanent installations, such as, but not limited to: runoff from construction activities, silting, pollutants (oil, industrial waste, cement) and disruption caused by road building, vehicular traffic, permanent installations like buildings, substations, and wind towers.	General measures that may be used to avoid, minimize, and/or mitigate impacts to these tributaries are provided in PSS Sections 2.7.4., 2.7.5, 2.8.4, and 2.8.5. As described in the PSS, a preliminary Stormwater Pollution Prevention Plan (SWPPP) will be included in the Certificate Application. The preliminary SWPPP will describe best management practices to be applied for erosion and sediment control and will include a spill prevention, control and countermeasure (SPCC) plan. The final SWPPP and SPCC would ultimately be reviewed and approved by the NYSDEC prior to Project construction.
95	Vacco, D. (Town of Somerset)	95.38	Commenter states the comments of the Town Engineer, Andrew Riley, PE, AICP, are expressly incorporated in their letter as Exhibit 9.	Comment noted.
95	Vacco, D. (Town of Somerset)	95.39	Regarding PSS Section 2.8, commenter states there may be wells utilized by farmers in the study area and these should be identified, along with a discussion of potential impacts.	Private water wells will be surveyed within defined setback distances from any blasting activities, to be defined in the Blasting Plan to be provided in the Certificate Application. Potential impacts to water wells in the vicinity of any blasting activities will be discussed in the Blasting Plan.
95	Vacco, D. (Town of Somerset)	95.40	Regarding PSS Section 2.8, commenter requests Lighthouse Wind identifies the parameters for dealing with stormwater not only during construction (sediment and erosion control plans) but after construction. These sites appear to be close to or exceeding 1 + acres of disturbance and therefore will require some level of post construction storm water control. Also, some of the turbines may be located close enough to one another to also warrant taking them together under the SWPPP. Thoroughly describe how the Project will meet NYS and Town of Somerset Stormwater requirements and the facilities that will be constructed to meet those regulations. The impacts of these facilities must also be identified in other environmental sections of this PSS document. These facilities, for example, will impact additional lands, streams, agriculture, etc.	Construction of the Project will disturb more than 1 acre of land and, as a result, will require a SPDES General Permit for Stormwater Discharges from Construction Activity. The SPDES general permit will require a final SWPPP and a sediment and erosion control plan consistent with the New York State Stormwater Management Design Manual and the New York State Standards and Specifications for Erosion and Sediment Control. A Preliminary SWPPP will be included in the Certificate Application and a Final SWPPP will be prepared during final engineering prior to Project construction. The Final SWPPP will include post construction measures for stormwater control and monitoring.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.41	Regarding PSS Section 2.8, commenter requests an analysis of the alternative stormwater facilities that could be constructed to mitigate quantity and quality stormwater impacts. Determine which facilities will best reduce the impacts of this Project and minimize impacts to other environmental features (agriculture, groundwater, land uses, etc.)	Typical stormwater control measures will be provided in the Preliminary SWPPP with the Certificate Application. Specific stormwater control measures and Best Management Practices will be provided in the Final SWPPP. Final engineering of the Project will not occur until after issuance of the Certificate. At this point hydrologic models will be used to calculate pre- and post-construction runoff rates in order to compare existing and proposed conditions. These results will be used to prepare the Final SWPPP in accordance with the State Pollution Discharge Elimination System (SPDES) General Permit.
95	Vacco, D. (Town of Somerset)	95.42	Regarding PSS Section 2.8, commenter requests a discussion on the impacts to groundwater and surface waters due to the construction of large concrete foundations. Discuss and analyze any leaching problems off of these concrete foundations. Also discuss and analyze impacts to groundwater flows due to these large foundations potentially impacting the flow of these ground waters.	Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soils acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project site would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions.  Very localized changes to groundwater flow and regime are possible from the presence of the concrete foundations, as these are impermeable structures and flows would be forced to move around a foundation rather than allowed to run through. The presence of the concrete (impermeable surface) within the earth may also represent a reduction in groundwater storage within the soils that are displaced. The presence of the foundations may result in changes to surface runoff and infiltration of surface water within the footprint of the turbines. It is not anticipated that any of these very localized changes in groundwater would affect any groundwater receptors such as private and public water wells as setback requirements for turbines would help to protect these resources from any potential change in groundwater flow. Further information regarding potential impacts on groundwater will be provided within the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.21	Regarding PSS Section 2.8, commenter states there may be wells utilized by farmers in the study area and these should be identified, along with a discussion of potential impacts.	Public and private water wells, including but not limited to agricultural-use wells, will be identified within the Project site and within a one-mile radius of the Project site. Wells will be identified by analyzing public and private water well databases (to the extent available) and in coordination with local and/or state agencies as well as affected landowners. These resources will be documented within the Certificate Application in conjunction with avoidance and minimization or mitigation measures to eliminate impacts to these resources.
95	Vacco, D. (Town of Somerset)	95.E9.22	Regarding PSS Section 2.8, commenter requests Lighthouse Wind identify the parameters for dealing with stormwater not only during construction (sediment and erosion control plans) but after construction. These sites appear to be close to or exceeding 1 + acres of disturbance and therefore will require some level of post construction stormwater control. Also, some of the turbines may be located close enough to one another to also warrant taking them together under the SWPPP. Thoroughly describe how the Project will meet NYS and Town of Somerset Stormwater requirements and the facilities that will be constructed to meet those regulations. The impacts of these facilities must also be identified in other environmental sections of this PSS document. These facilities, for example, will impact additional lands, streams, agriculture, etc.	Construction of the Project will disturb more than 1 acre of land and, as a result, will require a SPDES General Permit for Stormwater Discharges from Construction Activity. The SPDES general permit will require a final SWPPP and a sediment and erosion control plan consistent with the New York State Stormwater Management Design Manual and the New York State Standards and Specifications for Erosion and Sediment Control. A Preliminary SWPPP will be included in the Certificate Application and a Final SWPPP will be prepared during final engineering prior to Project construction. The Final SWPPP will include post-construction measures for stormwater control and monitoring.
95	Vacco, D. (Town of Somerset)	95.E9.23	Regarding PSS Section 2.8, commenter requests an analysis of the alternative stormwater facilities that could be constructed to mitigate quantity and quality stormwater impacts. Determine which facilities will best reduce the impacts of this Project and minimize impacts to other environmental features (agriculture, groundwater, land uses, etc.)	Typical stormwater control measures will be provided in the Preliminary SWPPP and included in the Certificate Application. Specific stormwater control measures and Best Management Practices will be provided in the Final SWPPP. Final engineering of the Project will not occur until after certification. At this point hydrologic models will be used to calculate pre- and post-construction runoff rates in order to compare existing and proposed conditions. These results will be used to prepare the Final SWPPP in accordance with the State Pollution Discharge Elimination System (SPDES) General Permit.

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95	Vacco, D. (Town of Somerset)	95.E9.24	Regarding PSS Section 2.8, commenter requests a discussion on the impacts to groundwater and surface waters due to the construction of large concrete foundations. Discuss and analyze any leaching problems off of these concrete foundations. Also discuss and analyze impacts to groundwater flows due to these large foundations potentially impacting the flow of these ground waters.	Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. Concrete has been used for centuries to build structures over aquifers without contaminating water tables or groundwater resources. In areas of high soils acidity, concrete mixes are generally designed to withstand sulfate attack. The soils within the Project Area would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local soil or groundwater conditions.  Very localized changes to groundwater flow and regime are possible from the presence of the concrete foundations, as these are impermeable structures and flows would be forced to move around a foundation rather than allowed to run through. The presence of the concrete (impermeable surface) within the earth may also represent a reduction in groundwater storage within the soils that are displaced. The presence of the foundations may result in changes to surface runoff and infiltration of surface water within the footprint of the turbines. It is not anticipated that any of these very localized changes in groundwater would affect any groundwater receptors such as private and public water wells as setback requirements for turbines would help to protect these resources from any potential change in groundwater flow. Further information regarding potential impacts on groundwater will be provided within the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.31	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.8.1, commenter states watershed sub basin boundaries should be added to the water resources map. This is a necessary tool for identifying sensitive areas, water impacts, and appropriate impact avoidance or mitigation. Since water moves between surface waters including wetlands, and underground resources, it is appropriate to discuss impacts on all of them together, rather than dividing them into different sections. Some impacts on water resources may be cumulatively significant throughout a watershed, and should be evaluated as such.	A map of surface waters compliant with 16 NYCRR § 1001.23(b) will be provided in the Certificate Application. The hydrological connection of surface waters, wetlands, and groundwater regarding impacts identified in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.32	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.8.1, commenter states an average depth is meaningless. What's needed is site specific soils information for each turbine location and all other construction sites. Evaluate how construction in areas that have a shallow depth to water table will affect groundwater, wetlands, and surface waters.	Site specific soil and ground water information will be obtained from the geotechnical investigation described in the PSS. A geotechnical investigation protocol will be prepared by a qualified engineer and presented in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.33	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.8.1, Lake Ontario is a Class A waterbody; the PSS text contains contradictory statements: "in general, public water supplies that use Great Lakes sources are not very susceptible to contaminants because of the size and quality of the Great Lakes." and " Public bathing and general recreational use of this waterbody are considered to be impaired based on monitoring... due to the well documented occurrence of algal blooms, particularly Cladophora, in shallower nearshore waters." A comprehensive evaluation of Lake Ontario water quality and the water quality of its tributaries within the study area is needed in order to identify adverse impacts.	It should be clarified that public bathing and general recreational uses are considered impaired because of the occurrence of algal blooms in <i>nearshore waters</i> . Public water supply use of Lake Ontario is fully supported. Public water intakes are typically located further offshore in deeper water. Contaminants in this portion of the lake are more diluted and the water can be effectively treated to keep contaminants below regulatory limits. Water quality will be assessed as required in 16 NYCRR § 1001.23 and presented in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.34	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.8.1, the commenter states that correspondence from the NYNHP is insufficient evidence for the conclusion that there are no rare aquatic species in the study area. The commenter would prefer the information in the NYS Wildlife Action plan be used to determine which aquatic species of conservation concern may be present in the study area, and then assess whether or not they are present. If any of these species are present, the commenter would like to know how they would be affected by project activities. Commenter indicates a plan for data collection is needed to identify adverse impacts on aquatic species, and should be included in the Certificate of Application.	Correspondence with the NYNHP provides a preliminary assessment of the potential occurrence of rare or state-listed animals and plants, and significant natural communities on or in the immediate vicinity of the Project site. Initial consultations with the NYSDEC have likewise not indicated the presence of aquatic species that would require specific surveys. The species included in the Southwest Lake Ontario Basin section of the NYS Wildlife Action Plan will be reviewed and assessed with regard to their potential occurrence within the Study Area. This information will be included in the Certificate Application. Lighthouse Wind will continue to consult with the NYNHP and NYSDEC regarding rare and state-protected species.

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100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.35	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.8.2, The PSS states that although excavating, trenching and grading could result in changes to overland, channel surface and subsurface flow and increase rates of infiltration, "due to the shallow nature of excavation activities for turbine foundations, impacts to groundwater quality, quantity or flow direction are unlikely." If "average depth" to groundwater is 1.1 feet there may indeed be impacts. More information, including site specific depth to groundwater for each turbine site, is needed. How do we know that dewatering areas around turbine foundations, which would lower the water tables and create a cone of depression at the site, "would likely recover once excavation is completed?" Identification of adverse impacts requires evidence for the veracity of this statement. Building roads, crane paths, staging areas, laydown areas etc. involve grading and compacting soil, and vehicular traffic increases this compaction. PSS states "Soil compaction decreases the porosity of soils and results in reduced rates of infiltration and increased surface runoff." What steps will be taken to describe the adverse impacts of soil compaction on small wetlands and streams, as well as groundwater, cumulatively across the study area?	Groundwater elevation data will be collected and analyzed in conjunction with geotechnical borings to be conducted for the Project. Except in areas within drought conditions, in which case it is unlikely groundwater would be encountered in shallow excavations, groundwater generally recharges in areas where pumping is discontinued. A pump can only draw water from a portion of the watershed, specifically, the cone of depression and upland recharge areas. Outside these areas, collectively termed the areas of contribution, groundwater does not move toward the area of influence (pumping). Instead, it moves in its normal patterns from the recharge area down to the discharge area of the watershed. When excavation activities are completed and pumping is discontinued, the former area of the cone of depression will be recharged by upland areas, as they would be in normal circumstances. More information on potential impacts to surface water and groundwater will be provided in Exhibit 23 of the Certificate Application. Decompaction activities, which help to reduce the impacts on groundwater recharge and surface water infiltration will also be discussed in exhibit 21 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.36	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Regarding PSS Section 2.82, Increased sediment load from project construction is a potentially significant impact on local small wetlands, streams, headwaters, etc. This needs to be quantified, along with the effect of changes in local drainage patterns. Wetlands connect surface and ground-waters; water quality impacts can be transported within the watershed; therefore impacts on wetlands can affect ground and surface water resources. Identify these impacts.	This information will be included in Exhibit 22 (Terrestrial Ecology and Wetlands) and Exhibit 23 (Water Resources and Aquatic Ecology) of the Certificate Application and in the Final SWPPP, which will be prepared as required for a SPDES General Permit for Stormwater Discharges from Construction Activity.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.37	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter suggests adding to the list of impacts: maintenance applications of herbicides; construction during breeding, or hatching or other sensitive life cycle stages; and sediment load.  Commenter notes that aquatic species include larval amphibians and indicates these species and their conservation concern status should be identified.  Commenter notes that impacts during project operation, including herbicide applications, mowing or cutting wetland or riparian vegetation, accidental releases of hazardous materials into the water and soil, stream crossings by vehicles, and soil erosion and runoff all have the potential to affect particular aquatic species (e.g. amphibians, insects) depending on life cycle stage and species sensitivity.	The commenter is correct that herbicide application, construction during sensitive life cycle stages, and sediment loads have the potential to impact aquatic species. Such activities are discussed specifically with regard to aquatic species and more generally with regard to surface waters and wetlands in PSS Sections 2.7.2 and 2.8.2. The Certificate Application will include an account of specific water resources, if any, that may be impacted, directly or indirectly, by the Project, including a discussion of the type and extent of such impacts. This will include a discussion of anticipated impacts, if any, to aquatic species during all life cycle stages. The Certificate Application will also include a discussion of specific measures to avoid or minimize impacts to surface waters and wetlands, which are expected to also limit potentially significant impacts to aquatic species. If further consultation with agencies and other stakeholders indicates a need for additional mitigation, any necessary mitigation measures will be thoroughly described in the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.38	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: In regards to PSS Section 2.8.4, commenter asks Lighthouse Wind to describe effects of blasting, if needed, on streams, wetlands, lakes, and aquatic species. A buffer zone referred to in the PSS as a "Restricted Activities Area", may be established where project construction traverses surface waters. The list of restrictions provided in the PSS may need to be expanded. Buffer zones and restrictions within them need to be described more precisely. To be effective (i.e. to provide water quality protection or wildlife habitat) buffers must be a minimum size (generally 100 feet for water quality protection) and support adequate vegetation (not mowed turf). More information is needed here regarding buffers and their protection during and after construction. Crossing the narrowest part of a water body or wetland does not necessarily protect water quality; identify adverse impacts of these crossings.	Blasting will be further discussed in Exhibit 21 of the Certificate Application. Included with the discussion will be an assessment of potential impacts of blasting, if necessary, to environmental resources. Wetland and stream crossings in addition to any applicable buffer zones on wetlands and or streams would be discussed at more length and detail within Exhibit 22 and Exhibit 23 of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.41	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter requests a water resources map that includes boundaries of all sub basins within the study area.	Water resources will be mapped in accordance with 16 NYCRR § 1001.23 and presented in Exhibit 23 of the Certificate Application. This requirement does not include mapping of subbasin boundaries.

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102	Behnke, H. (DPS)	102.23	Regarding PSS Section 2.1.2.1 and 2.1.3, DPS Staff recommends that additional outreach and engagement with County Soil and Water Conservation District and local Natural Resource Conservation Service personnel should be initiated during development of the final Scoping Statement. Location of areas with drainage tile installations, with tile system design and layout information should be collected and incorporated into Project Area planning. (Additional consideration of this topic is provided below in comments on Geology, Seismology and Soils – Exhibit 21.) The Town of Somerset 2012 Comprehensive Plan Update references four independent tile systems which deliver surface water either directly to or via drainage ways to Golden Hill Creek (Comp. Plan Update, p. 19). This plan also states that “drainage considerations must be included in all development proposals” (id., p. 19). The Revised Scoping Statement must give significant attention to this issue, as it relates to immediate effects of construction and long term site conditions, as well as influences on productivity and use of agricultural and other lands, water quality in downstream aquatic systems, and environmental quality at receiving waters such as at the natural habitat area and lakefront recreational use area in Golden Hill State Park and adjoining shorefront locations. (DPS Staff notes that this aquatic system may already be significantly stressed as reported by NYSDEC: see information below regarding Watershed Characterization in Water Resources and Aquatic Ecosystems.)	Lighthouse wind will engage County Soil and Water Conservation District and Natural Resource Conservation Service personnel to ensure that impacts to water resources are minimized or avoided to the maximum extent practicable prior to submission of the Certificate Application. It is expected the Project will avoid the four drain tiles mentioned as part of the storm sewer system in the Village of Barker. Lighthouse Wind will obtain these tile locations to ensure that adverse impacts can be avoided. Agricultural drainage will be protected as described in PSS Sections 2.1.4 and 2.1.5 and the NYS Guidelines for Agricultural Mitigation for Wind Power Projects (2013). Specific protection measures and any necessary mitigation will be included in the Certificate Application along with the Preliminary Stormwater Pollution Prevention Plan (SWPPP) and Erosion and Sediment Control Plan. Detailed engineering necessary for the Final SWPPP and the SPDES General Permit will not be possible until after Project certification. Preparation of the Final SWPPP will be consistent with the New York State Stormwater Management Design Manual and the New York State Standards and Specifications for Erosion and Sediment Control.
102	Behnke, H. (DPS)	102.87	Although no drinking water wells were identified within the Project area during Lighthouse Wind's review of the NYSDEC database, further investigation is required to identify any existing public or private drinking water wells in the Project area. The PSS should provide a detailed plan for identifying drinking water wells, including consultation with the NYS Department of Health, Niagara County Water District, Orleans County Department of Public Health and implementation of a well survey mailing to landowners within the Project area. The results of the investigation should be provided in the Application, along with plans for avoiding or minimizing impacts to drinking water supply wells during construction activities, including blasting.	Lighthouse Wind will consult with the NYS Department of Health, Niagara County Water District, and the Orleans County Department of Public Health regarding the presence of drinking water wells within the Project site and the requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.88	The surface waters within the Project area drain into Lake Ontario, a Class A waterbody suitable for water supply, public bathing and general recreation use, and support of aquatic life. This includes the Lyndonville Village water supply intake in Lake Ontario near the northeast corner of the Project area. Because of the primarily fine-grained soil types and generally flat topographic features of the Project area, there is a significant risk during construction of sediment transport and turbidity impacts to surface waters draining into Lake Ontario. The application should include a detailed description of erosion control measures that will be implemented to avoid transport of fine-grained soils to the lake during construction. Prevention of transport of stockpiled fine-grained soils should be addressed in the Revised Scoping Statement.	The requested information will be included in the Erosion and Sediment Control Plan as part of the Certificate Application.
102	Behnke, H. (DPS)	102.89	Regarding PSS Section 2.8.2.1.1, commenter states because of the generally shallow depth of the groundwater table in the Project area, it is anticipated that dewatering will be required. Existing soils in the area are generally characterized as having low infiltration rates and low topographic relief. The Application should include a detailed description of the proposed dewatering practices and a demonstration of how the proposed dewatering will avoid and/or minimize flooding, surface water runoff, and transport of fine-grained soils into existing surface water bodies.	The requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.90	Regarding PSS Section 2.8.3, delineations of surface water bodies should include those within 100 feet of soil stockpiling areas, construction staging areas (marshalling yards) and any other construction related areas.	As stated in the PSS, wetland delineations will be conducted within 100 feet of planned access road centerlines/buried interconnects and within a 200 foot radius of planned turbine locations. Lighthouse Wind would be willing to commit to extending this commitment to include conducting delineations for all surface waterbodies (including streams) within 100 feet of all proposed construction work areas and 200 feet from planned turbine locations.
103	Edick, R (NYSDEC)	103.2	Lighthouse Wind should prepare a spills management plan that describes procedures to address proper reporting, cleanup, and documentation of spills.	A Spill Prevention Control and Countermeasure Plan will be included in the Certificate Application.
103	Edick, R (NYSDEC)	103.20	If DEC regulated streams are impacted, the Project must meet standards established by ECL Article 15 (Protection of Waters) unless directional drilling is used to avoid all disturbance to the bed or banks of protected streams.  Given the early stage of this Project and the non-specific nature of the maps, the assessment of whether the Project conforms to ECL Article 15 requirements will require further study. Also, more detail needs to be provided by Lighthouse Wind regarding any stream segment for which a crossing or disturbance is proposed, to determine if the waterway meets the New York State definition of "navigable."	In conformance with ECL Article 15 (Protection of Waters), any proposed impacts to NYS regulated streams will be described and assessed in the Certificate Application . It is expected the procedural requirements of an Article 15 permit will be supplanted by the Article 10 process.
103	Edick, R (NYSDEC)	103.21	Stream crossings should be designed with the goal of protecting stream continuity, as described in the DEC web page, Stream Crossings: Guidelines and Best Management Practices, available at: <a href="http://www.dec.ny.gov/permits/49066.html">www.dec.ny.gov/permits/49066.html</a> . All crossings of class C(T) or higher streams should be completed using temporary or permanent crossing structures. Driving equipment directly through the stream would not be permitted.	Any unavoidable stream crossings will be listed in the Certificate Application and crossing methods will incorporate the NYSDEC Best Management Practices.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
103	Edick, R (NYSDEC)	103.22	<p>In addition to the protected streams classified as C(T) or higher and portions of C streams which are navigable, the potential impacts to other C streams (primarily Golden Hill Creek) should be avoided/minimized to the extent possible. Regional staff has made recent efforts to have Golden Hill Creek upgraded to C(T), because the stream does receive seasonal runs of salmonids, primarily steelhead. The paperwork for reclassification has been submitted to Albany Bureau of Habitat.</p> <p>Golden Hill Creek is not a low quality resource - contrary to 2.8.1.2.1. Watershed (pg. 56) - 2nd Paragraph. The line "Aquatic life support and recreational uses (fishing) in Golden Hill Creek are impaired by unknown pollutants. Organic wastes are the suspected cause though other factors may also contribute" is incorrectly referenced as NYSDEC, 2015d. Lake Ontario/Twelve Mile Creek Watershed Assessment (<a href="http://www.dec.ny.gov/docs/water_pdf/wilkontwtwelvemile.pdf">http://www.dec.ny.gov/docs/water_pdf/wilkontwtwelvemile.pdf</a>). The actual source of this line (cited above) is Lake Ontario/Golden Hill Creek Watershed Assessment <a href="http://www.dec.ny.gov/docs/water_pdf/wilkontwgoldenhillcr.pdf">http://www.dec.ny.gov/docs/water_pdf/wilkontwgoldenhillcr.pdf</a> which was based on a biological assessment 16 years ago.</p> <p>A biological assessment from 2000 (same year as a fish kill from a chlorine discharge) should not be used to determine that aquatic life and recreation (fishing) in Golden Hill Creek are currently impaired. On the contrary, Golden Hill Creek and Estuary currently support a variety of quality fishing opportunities. In early spring, there is very good yellow perch and bullhead fishing in the harbor/estuary section. Also in spring, there is a significant run of steelhead (rainbow trout) well up into the creek. If flow rates are adequate in the fall, salmon and brown trout will also run the creek. As Project Layout to include turbine locations, access and collection line placement, and lay down areas, is made available, the application should work closely with DEC regional stream experts to ensure that impacts are avoided - when possible - and minimized when they cannot be avoided.</p>	<p>The updated information regarding Golden Hill Creek is appreciated and will be used in development of the Project. Lighthouse Wind expects that Golden Hill Creek will be upgraded to C(T) and will proceed under that assumption. If this stream is upgraded prior to filing the Certificate Application, Lighthouse Wind will fully incorporate this change into the discussion of impacts and any avoidance, minimization, and mitigation measures. Lighthouse Wind will consult with NYSDEC regional stream experts to ensure that impacts are avoided, minimized or mitigated if impacts cannot be avoided.</p>
DMM74	Markel, S.	DMM74.2	<p>Commenter states that environmental damage to local creeks and streams, all tributaries to Lake Ontario, will result from degradation of tons of concrete used to anchor the turbines in the ground, seriously harming the environment for the rich population of local trout and salmon in western New York waterways. Fishing and hunting bring a stream of cash to the state and local economy, supporting local businesses and jobs. Commenter concerned about impacts of Project on Tourism and Fishing/hunting.</p>	<p>Impacts to waterways, groundwater, fish, recreational opportunities, and socioeconomics will be assessed as described in the PSS and any adverse impacts will be presented in the Certificate Application.</p> <p>Concrete is used in construction of drinking water facilities, dams, bridges, and fish holding tanks without adverse environmental effects. The soils within the Project Area would be analyzed for geotechnical and chemical characteristics prior to construction and any required modifications (to adjust for localized soil conditions) to the concrete mixes would be made prior to construction therefore limiting or even eliminating the likelihood of alkaline leaching. It is not expected that effects of leaching would have any significant impact on the local surface water conditions.</p>
<b>Visual Impact (PSS Section 2.9/Application Exhibit 24)</b>				
8	Smith, D.	8.3	When will assessment of shadow flicker on area receptors and residents be completed?	Shadow flicker studies will be completed and presented in Exhibit 24 of the Certificate Application.
12	Smiley, A.	12.3	Commenter requests an explanation of visual screening of turbines. How does screening of turbines work? Commenter requests temporary and permanent visual impacts are strongly taken into consideration.	The term "screening" typically refers to existing built and natural features in the landscape (houses, buildings, trees and landform) which may serve to block views of the proposed action from particular locations. Viewshed analysis will assist in identifying these areas and will be included in the full visual assessment to be provided in Exhibit 24 of the Certificate Application.
12	Smiley, A.	12.4	Commenter asks if consideration will be taken towards the location of turbines with regards to scenic vista/route Highway 18.	Potential impacts to the Great Lakes Seaway Trail (Route 18) will be addressed in the Visual Impact Assessment to be provided in the Certificate Application.
13	Markey, S.	13.6	Commenter notes that placement of the Project runs counter to guidelines for Great Lakes Seaway Trail, a federally designated National Scenic Byway, running along the Route 18 corridor. Great Lakes Seaway Trail is popular tourist route for visitors, campers, fishermen, and bird enthusiasts. Scale of and environmental impacts from project would be detrimental to views and agricultural nature of Trail.	The Visual Impact Assessment to be provided in the Certificate Application will address potential impacts to the Seaway Trail. Lighthouse Wind will review applicable guidelines and coordinate with the National Scenic Byway Program in determining the Project layout.
14	Mullane, P.	14.1	Commenter believes the Project will affect the aesthetics of the lake shore.	The Visual Impact Assessment will address potential visual impacts along the lake shore and will be discussed further in the Certificate Application .

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
21	Spitzer, D. (Attorney for Town of Yates)	21.6	Commenter notes that Lighthouse Wind reached out to 15 local communities within a 10 mile area of the Project site with respect to identifying aesthetic and visually sensitive resources across those areas. The PSS indicates that responses were only received from four communities, and only two of those responses were substantive. Commenter request Lighthouse Wind be required to follow up with and obtain responses from the remaining communities prior to completing any visual resource impact study during the application process. In any case, the visual impact analysis must identify important vistas and resources in the Town and surrounding community. The Town also requests that Lighthouse Wind perform a study to assess the cumulative visual impact of existing industrial uses (including CSX railroad, Somerset Operating power plant) in conjunction the proposed wind turbines to assess the combined effect of these components on the otherwise rural, agricultural character of the Project area.	A third request is being sent to Towns and Historic Societies included in the visual study area for any or additional sensitive locations for consideration in the Visual Impact Assessment. In addition to resources provided by Towns in response to the information request, a list of potentially visually sensitive receptors/locations is also being developed. Cumulative impacts with existing industrial uses will be addressed in the Visual Impact Assessment. The Visual Impact Assessment will be provided in the Certificate Application.
32	Kohlman, R.	32.1	Commenter notes that 70 windmills that are 570' high with rotating blades are proposed and notes that you cannot hide the impact of these towers on his property (located north of Lakeshore Road), family, and his life. Lighthouse Wind needs to realistically define these impacts. States a third party engineering firm should assess the results for accuracy.	The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project which will be conducted in accordance with the requirements of the Article 10 regulations. The Visual Impact Assessment is a technical process that will provide accurate simulations of the Project that allows for an assessment of the potential impact. Lighthouse Wind will not have a third party engineering firm review the results of the Visual Impact Assessment prepared for the Certificate Application. A comment period following the Certificate Application submittal will allow for comments of the Visual Impact Assessment.
35	Bansbach, J.	35.1	The commenter quotes PSS Section 2.9.1 interpreting that "unless you are in the Villages of Lyndonville or Somerset, or totally surrounded by trees, you WILL see these wind turbines". Commenter also notes that the 600 ft. smokestack from the coal plant is clearly visible from Lockport and Toronto. Commenter uses Section 2.9.4 to express his displeasure for the turbines being everywhere and clearly visible.	The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project. It will use a viewshed analysis to identify locations of visibility within the visual study area.
37	Crafts, C.	37.6	Siting of this Project seems to be based on the fact that the state previously built the coal plant at Somerset. In this flat landscape, the Somerset plant, when it is allowed to operate, is visible from Medina. I do not see that view improved by the addition of 70 wind turbine towers which will remain long beyond the departure of your company.	The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project. As described in Section 2.15.1, the Towns of Somerset and Yates were chosen for several reasons as being economically viable for a wind energy project. Although complementary industrial land uses in the area are a factor reviewed for project viability, it is not the only, or main, factor deciding the selection of areas.
38	Carter, D. (NYS PRHP)	38.1	Commenter asks, when the PSS mentions lighting the turbines is it talking about navigational lighting (blinking red lights for aircraft) or are they planning on lighting the turbines for visibility? If this is for visibility it is suggested that the lighting follow dark sky principles so as not to create additional light pollution in the area.	Lighting for wind turbines is specified by the FAA lighting standards Advisory Circular AC No: 70/7460-1L and will include the lighting of turbines with FAA approved, red flashing lights directed upward to maximum pilot visibility and minimize visibility to viewers at lower elevations. A lighting plan will be developed to incorporate these requirements. All outdoor lighting on Project buildings will be downshielded. To preserve dark skies, Lighthouse Wind will limit hazard lighting to the minimum number of lights at the minimum intensity required by the FAA.
38	Carter, D. (NYS PRHP)	38.2	The same visual analysis that is planned for the preferred alternative should be undertaken for all alternatives that are being considered. Without those other analyses there is no way to compare the visual impacts from the various alternatives.	The Visual Impact Assessment for the proposed Project will be included in Exhibit 24 of the Certificate Application. At this time, it is anticipated that only one proposed alternative (preferred) will be evaluated. The analysis will also include any proposed mitigation and mitigation alternatives based upon the analysis.
38	Carter, D. (NYS PRHP)	38.3	Commenter believes one of the viewpoints should be taken from the upper floors of the 30 Mile Lighthouse. Knowing the impact on the view from that structure would be important and it may not be enough to only consider those impacts using topography and vegetation from a point on the ground.	Viewpoint selection is based upon input from public comments, municipal planning representatives, DPS, DEC, OPRHP, and APA. Lighthouse Wind will evaluate potential visual impacts on historic resources such as the lighthouse in the Certificate Application. A representative view from the upper stories of the lighthouse will be included in the analysis.
38	Carter, D. (NYS PRHP)	38.4	The effectiveness of photographic simulations is questioned because of the possibility of manipulation. The use of balloons to simulate the height of the turbines is preferred.	The use of balloons is not practicable for multiunit projects such as this and is not necessary due to the advances in technology and the methods and tools available for preparing simulations. It can also present some technical difficulties associated with the flying of a large tethered balloon. Visual simulations will be completed in accordance with the Article 10 requirements and will provide an accurate representation of the proposed turbines.
38	Carter, D. (NYS PRHP)	38.5	It is suggested to use photographic simulations to compare the effects of several different colors of turbines. The color of least impact would be the preferred alternative.	FAA dictates the required turbine color for maximum conspicuity from the air. Any deviation from white (or off white) could trigger the requirement for high intensity daytime lighting at each turbine location (AC No: 70/7460-1L).
45	Stockman, G.	45.5	Values will be challenged in the presence of the turbines. The view will be obstructed for at least 10 miles, as the only structure nearby in height to the proposed turbines is the Somerset coal-fired power plant and it is viewable for at least that distance. It is difficult to image how vegetative screening or topographic screening will be of much assistance with these turbines. I encourage you to extrapolate on that point.	The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project. Screening by natural features in the landscape will be included in the assessment and discussed in Exhibit 24 of the Certificate Application.

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49	Wolanyk, E.	49.4	Commenter notes page III of the PSS states the turbines will be visible from many locations within the surrounding area, but will also be fully or partially screened from viewers in many locations. Due to the very flat nature of the landscape of the Towns of Somerset and Yates, NY and the proposed height of these industrial wind turbines, commenter believes it is very unlikely that any of these industrial wind turbines will be fully or partially screened from any viewers. The 600 foot smokestack of the Somerset Generating Station (formerly Kintigh Generating Station) can be seen from Sheraton Road near where it intersects Transit Road in the town of Williamsville more than 30 miles away. These turbines will certainly be seen from that point as well and travelling to and from the area for as many miles. There can be not disguising the eyesore that they will be on a rural landscape. Not to mention that they will be able to be seen from the water by anyone using a recreational vehicle, fishing, swimming or boating for an even further distance. If these industrial wind turbine monstrosities are to be built every resident in this proposed area should be compensated for having them destroy the scenic nature of this area not to mention the impact on health and well-being.	The reason for conducting the Visual Assessment is to address the potential visual impacts of the Project. Screening by natural features in the landscape will be included in the assessment and discussed in Exhibit 24 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.43	Regarding PSS Section 2.9, commenter claims Lighthouse Wind is not impartial and cannot be entrusted with the responsibility of preparing an unbiased Visual Impact Assessment ("VIA") as required by 16 NYCRR § 1001.24. On October 19, 2015, Lighthouse Wind did indeed send a letter to stakeholders seeking input for a VIA. However, the letter set an arbitrarily strict deadline of October 30 for submitting information to Lighthouse Wind's hand-picked VIA consultant. In response, the Town informed Lighthouse Wind that it required additional time to provide a meaningful response given the large number of visual assets in Somerset. Filing No. 114. Lighthouse Wind never responded to the Town's request, and has apparently proceeded with a VIA without the Town's input.  The Town demands that a new, impartial consulting firm be retained to perform a fair and accurate VIA. Simply put, the Town does not believe Lighthouse Wind or its current consultant will produce a fair and unbiased assessment.	Lighthouse Wind is following the requirements of the Article 10 regulations and has retained a reputable firm with expertise in the production of visual simulations and unbiased Visual Impact Assessments The process will be conducted in accordance with the Article 10 requirements and presented in Exhibit 24 of the Certificate Application. A third request is being sent to Towns and Historic Societies included in the visual study area for any or additional sensitive locations for consideration in the Visual Impact Assessment.
95	Vacco, D. (Town of Somerset)	95.44	Regarding PSS Section 2.9, commenter states the PSS and project scope should be modified to incorporate the importance of the Great Lakes Seaway Trail as a component of the Project viewshed.	A third request is being sent to Towns and Historic Societies included in the visual study area for any or additional sensitive locations for consideration in the Visual Impact Assessment. The Great Lakes Seaway Trail will be included in the Visual Impact Assessment
95	Vacco, D. (Town of Somerset)	95.45	Regarding PSS Section 2.9, commenter states Lighthouse Wind must also be required to reveal the actual location of turbines and land under lease so that the impacts of shadow flicker on nearby residential areas can be determined via Shadow Flicker Analysis. Both shadow flicker studies and the eventual VIA must take into account the proximity of turbines to the narrow but densely populated residential area located near the lake shore.	The shadow flicker analysis to be included in the Certificate Application will assess the proposed turbine locations. Representative views from the lakeshore area will be included in the Visual Impact Assessment.
95	Vacco, D. (Town of Somerset)	95.46	Regarding PSS Section 2.9, commenter states Lighthouse Wind must be required to provide a full list of preexisting "aesthetic problems" that it might wish to "correct." Somerset proposes that should the Project be sited in Somerset, Lighthouse Wind should be required to "correct" the problem of decreased property values as an offset to the aesthetic problems caused by Lighthouse Wind.	The Visual Assessment will address potential visual impacts and will consider the existing visual environment in the analysis. As stated in Section 2.12.3 of the PSS, property values will be evaluated by conducting a thorough literature search and presented in Exhibit 27 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.25	Regarding PSS Section 2.9, commenter states per the Wind Energy committee's recommendations for a new law, visual impacts should be performed for not only visually sensitive sites but for all residential structures.	The recommendation mentioned in the Comment relates to recommendations made by certain members of the Wind Committee. It is noted that these recommendations were not adopted by or voted on by the Wind Committee. Nevertheless, the Town Board is considering the proposed amendment to the zoning law which contains this application requirement. Since the process of obtaining a special use permit from the Town of Somerset is preempted by Article 10, this requirement is not applicable. Nevertheless, Lighthouse Wind will respond to the comment seeking visual simulations for all residential structures by noting that this is not feasible. Instead, as required by Article 10, Exhibit 24 will include a Visual Impact Assessment with viewpoints representative of the study area and simulations from specifically identified visually sensitive sites. This is consistent with DEC Guidance. In addition, during the remaining scoping phase, Lighthouse Wind will be reaching out to the Towns and other stakeholders regarding their input on representative locations for simulations consistent with the requirement in the regulations. A copy of the Visual Impact Assessment scope is provided as Appendix G to this response document.

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95	Vacco, D. (Town of Somerset)	95.E9.26	Regarding PSS Section 2.9, commenter states in accordance with the results of the Wind Energy committee, shadow flicker should not be minimized but eliminated from any residential structure.	As mentioned in previous responses, the recommendations by the Wind Committee are not binding on Lighthouse Wind in this Article 10 process and it is not feasible for Lighthouse Wind to eliminate potential shadow flicker effects from all residential structures. For one, many of the structures that may experience the greatest potential impact from shadow flicker are participating host landowners that have agreed to, or will agree, to have turbines located on their properties. Generally, the potential impacts associated with shadow flicker will be addressed in the Application in Exhibit 24. As indicated in the PSS, the shadow flicker report will contain a summary of impacts at each receptor within the assessment area (generally the area within 10 rotor diameters - see paragraph below) and areas which are expected to receive over 30 hours of shadow flicker per year. This standard is widely used in wind farm development projects and is considered a strong indicator of potential annoyance and trigger for potential mitigation measures, which are identified in Section 2.9 of the PSS.  The U.S. Department of Interior's Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States indicates shadow flicker effects are dramatically mitigated at distances beyond 10 rotor diameters. Similarly, the Rhode Island Land-Based Wind Siting Guidelines and the Massachusetts Model As-of-Right Zoning Ordinance or Bylaw: Allowing Use of Wind Energy Facilities state "the impacts of shadow flicker diminish rapidly with distance and should be minimal at 10 or more rotor diameters." This standard is commonly used on projects in New York State as well as in other states and countries.]
95	Vacco, D. (Town of Somerset)	95.E9.27	Regarding PSS Section 2.9, commenter states the actual finalized locations and height of the turbines will be affected by the visual impact analysis. Turbines should not be visible from residential or important cultural resources (historic structures, parks, the Seaway Trail, present and future tourism areas, etc.).	The Visual Impact Assessment will address potential visual impacts based on the most recent available and likely Project layout information.
95	Vacco, D. (Town of Somerset)	95.E9.28	Regarding PSS Section 2.9, mitigations and alternatives to be analyzed include; location of the facilities, size of the units, screening/buffering, lighting, color, etc.	The Visual Impact Assessment will incorporate these items in the Certificate Application.
97	Wasilewski, T.	97.4	Regarding PSS Section 2.9, commenter requests Lighthouse Wind reviews a wind turbine visibility study done by the Argonne National Laboratory a unit of the U.S. Department of Energy. Commenter notes several newspapers have reported the IWTs will be up to 620 ft.--a height that would make them the tallest in North America. The Argonne study by Robert G. Sullivan and others was done in Colorado and Wyoming and had IWTs that ranged from 298-404 ft. in height and Mr. Sullivan indicated in the study that newer turbines which are bigger will have significant negative visual effects on the landscape. Commenter claims Apex Clean Energy in 2011 built the Cedar Creek I wind farm in Northeast Colorado that was included in the Argonne study. Below is more detailed information on the Argonne study including extensive quotations-the link is <a href="http://visualimpact.anl.gov/windvitd/">http://visualimpact.anl.gov/windvitd/</a>  Wind Turbine Visibility and Visual Impact Threshold Distances, Visual Resource Analysis at Argonne National Laboratory by Robert G. Sullivan Program Manager (630)-252-6182 <a href="mailto:sullivan@anl.gov">sullivan@anl.gov</a>  The last paragraph of the report on page 44 addresses and important question: "As more and larger wind facilities are built throughout the western U.S., finding the answer to the fundamental question that visual impact threshold distance studies address-"How close is too close?"- becomes ever more important. The Lighthouse Wind project is reported to have IWTs over 200 ft. taller than what the Argonne study was based on. Certainly the problems identified will be magnified by the Lighthouse Wind project. The State of New York must require Lighthouse Wind to answer the problems brought out by the Argonne study. Lighthouse Wind claims their project will no visual impact problems--are going to believe them or the results of the study by the Argonne National Laboratory.  Commenter would like a larger visual impact assessment study area.	The Cedar Creek I Wind Farm was not built by Apex Clean Energy. The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project. The visual study area has been defined as a 10 mile radius from the Project. The viewshed analysis that will be presented in the Visual Impact Assessment will document the potential viewer locations where turbines could be visible and similarly will show areas where they will not be visible.  Additionally, Lighthouse Wind has not yet selected a turbine manufacturer or model and therefore, the exact height of the proposed turbines are currently unknown. Lighthouse Wind has made no conclusions to date regarding visual impacts.
102	Behnke, H. (DPS)	102.91	The NYSDEC Visual Policy is a guidance document developed for NYSDEC staff not familiar with visual impact assessment evaluation methodologies to review visual impact assessments in SEQRA reviews; the policy by its terms is not applicable to DPS reviews. While the Policy is useful in defining categories of resources, and in describing reasonable mitigation strategies, it does not address visual impact characterization, or require descriptions of or consideration of visual contrasts of development activity as compared to existing conditions.  Thus, it does not establish a rational basis for requiring actual application of mitigation measures. Furthermore, the Policy does not address consideration of local visual resource evaluations or community character comprehensively. The requirements of Article 10 Exhibit 24 are explicit, and should be followed in developing the application content to address this topic.	DEC Visual Policy, 2000 will be included as a guidance resource. The Visual Impact Assessment will be conducted in accordance with Article 10 regulations which contain specific guidance for the preparation of visual impact assessments.

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102	Behnke, H. (DPS)	102.92	While defining appropriate key viewpoints for developing detailed visual impact assessment simulations will depend on wind turbine and other major Project facilities proposed locations, which are currently not available for review, Lighthouse Wind should propose classification criteria for the definition of Landscape Similarity Zones, as well as criteria such as distance zones, public use areas, and potential sites and candidate locations for developing representative viewpoint locations for VIA assessment in its response to these comments.	Landscape similarity zones (LSZs) are homogeneous geographic areas that exhibit similar vegetation, topography, water resources, land use, and land use intensity. The Landscape Similarity Zone breakdown, distance zones, viewer groups and specific selection criteria will be presented in the Visual Impact Assessment. Additional information request letters will be provided to the Towns and Historic Societies included in the visual study area. Viewpoint selection will be undertaken once the information is received and final LSZ can be defined. Appendix I to this response document is an updated list of significant resources which will be updated upon further consultation with SHPO and local representatives.
102	Behnke, H. (DPS)	102.93	The list of data and information sources for identifying visually-sensitive locations (PSS page 65) should also specify sources including: local and regional land use plans; Local Waterfront Revitalization Plans; Seaway Trail National Scenic Byway personnel, and Seaway Trail Byway Corridor Management Plan documents; Golden Hill State Park management personnel; County Planning Department staffs; and DPS Staff.	The Certificate Application will include an updated, final list of visually sensitive locations. A third request for information will be sent to the Towns and Historic Societies included in the visual study area and information received incorporated in the analysis. The Visual Impact Assessment provided in the Certificate Application will identify the sources of the final visually sensitive resources.
102	Behnke, H. (DPS)	102.94	Shadow flicker analysis should not be limited exclusively to occupied structures, as suggested at page 66. Locations including public use areas (Lyndonville School buildings, Golden Hill State Park, Town and Village parks, Babcock House Historic Museum, and planned Multiple Use Area at Somerset Power Plant site); recreation areas such as sports fields at public schools and Town properties, should be evaluated as appropriate to turbine facility locations proposed in Project Layout.	Lighthouse Wind will include selected public use areas in the shadow flicker analysis study area (typically a 10-rotor diameter area around the turbines).
102	Behnke, H. (DPS)	102.95	Visual impact avoidance strategies (as listed at PSS page 67) should include siting turbines and other facilities away from and out-of-site from sensitive visual receptors, where feasible.	The most effective means of mitigating visual impacts is through optimal siting and design of Project components. Potential visual impacts to sensitive receptors will be evaluated in the Certificate Application, allowing for specific avoidance or mitigation measures to be applied on a case-by-case basis.
102	Behnke, H. (DPS)	102.96	Visual impact consideration should apply to other permanent facility components as well as to wind turbines: facilities including a new substation, any associated transmission line, overhead electric collector lines, an Operations and Management building or compound; and temporary construction-related facilities including storage and laydown areas, concrete batch plant, contractor office compound or 'trailer city' setup, and related structures can have significant temporary impacts depending on location. Outdoor lighting for facility components are also sources of adverse visual effects that should be identified and assessed, and appropriate minimization and mitigation strategies considered.	Other facilities such as any new substation, associated transmission line, overhead electric collector lines, Operations and Management building and turbine lighting will be included in the Visual Impact Assessment. Proposed project lighting will be included in the Lighting Plan as required, in Exhibit 11 of the Certificate Application. All outdoor lighting on Project buildings will be downshielded. Temporary construction areas will be selected based upon land-owner approval and Project needs. These areas may be visible from historic structures or properties, but the impacts will be limited to the period of active construction.
102	Behnke, H. (DPS)	102.97	Preliminary solicitation of recommendations for visual receptor locations from local groups may have been premature, since Project facility locations are not known, and areas of project visibility (viewshed area) have not been identified.	The initial set of letters was intended to solicit suggestions from the community representatives for the Towns in the study area as input to the analysis. It is not necessary to know the final location of any of the proposed facilities to provide such a list of areas a Town considers potentially visually sensitive and so in that sense, the request was not premature. A third request for this information will be sent to the Towns and Historic Societies included in the visual study area to provide an opportunity to provide additional resources for consideration.

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.98	<p>DPS Staff recommends developing a list and photographic inventory of visual resource locations to inform consultation process for selecting final candidate locations for the visual photo simulation and visual impact evaluation. Based on initial review of the area without benefit of a Project layout or specific Project Site or viewshed area, an Initial List of Potential viewpoints for visual photo simulation study should include:</p> <ul style="list-style-type: none"> <li>• Seaway Trail – series of locations, cumulative review</li> <li>• Niagara Historic trail – series of locations (see attached map - App B) from</li> <li>• Niagara County Communities Comprehensive Plan, 2009)</li> <li>• Golden Hill State Park; &amp; 30-Mile Lighthouse from Lighthouse tower</li> <li>• Lake Ontario views landward from open water areas including scenes with views of 30-Mile Lighthouse</li> <li>• Krull Park – Niagara County at Olcott</li> <li>• Town and Village Parks</li> <li>• Barker Bicentennial Park at Lakeview Road</li> <li>• Somerset town hall , rec area and vet's memorial</li> <li>• Babcock House Museum and grounds</li> <li>• Village of Lyndonville Park – views north and NW from pond at</li> <li>• Johnson Creek, sidewalk at waterfall overlook</li> <li>• Somerset town hall , recreation area and veteran's memorial</li> <li>• Lakefront beach, piers and bluffs at Olcott</li> <li>• Lyndonville Central School front, school playgrounds/sports fields</li> <li>• Cobblestone Farmhouse - #2134 NYS Rt. 269 potentially eligible NRHP property, with views Northeast and East to the Project Area.</li> <li>• A range of residential settings with open views toward the Project Site, including lakefront residential, village settings, and rural residential sites.</li> </ul> <p>Town cemeteries:</p> <ul style="list-style-type: none"> <li>• County Line Cemetery</li> <li>• Sawyer Cemetery</li> <li>• Somerset Cemetery &amp; Vet's memorial</li> <li>• West Somerset Cemetery – Hosmer Rd</li> </ul>	These resources have been identified and will be included in the Visual Impact Assessment.
102	Behnke, H. (DPS)	102.99	The Application should report the top elevation in feet of proposed turbines and blade tip heights for all turbine models under consideration as alternatives.	The various models of turbines considered and the aboveground elevation of the turbines and blade tips will be described in the alternatives analysis in the Certificate Application.
102	Behnke, H. (DPS)	102.100	The proposed five mile radius Visual Study Area around the Project Area includes sections of Ridge Road, NYS Route 104, located south of the Area. Ridge Road provides some open long-range vistas north toward the Project Area. The Visual Study Area should be expanded somewhat to include the continuous sections of Ridge Road, and an inventory of public space, recreational and cultural properties with open views should be developed as part of the Visual Study.	The visual study area is defined by a 10 mile radius. The full Visual Impact Assessment scope is included as Appendix G to this response document.
102	Behnke, H. (DPS)	102.101	<p>PSS Section 2.9.3 states: "Shadow flicker is generally limited to relatively short periods during times of day/year when the sun is low in the sky. While shadow flicker has not been linked to any health effects, it may cause an annoyance for occupants of an affected structure."</p> <p>The discussion of flicker impacts in the PSS does not provide a sufficiently detailed basis to support the statements.</p>	The effects of shadow flicker will be assessed in the Certificate Application. The shadow flicker report will contain a summary of impacts at each receptor within the study area that is expected to receive over 30 hours of shadow flicker per year. This is a common standard employed to attempt to reduce annoyance levels at non-participating properties. Potential mitigation measures are described in Section 2.9 of the PSS and may be implemented at significantly affected receptors on a case-by-case basis.
102	Behnke, H. (DPS)	102.102	Please provide a discussion about potential health effects from flicker in the application.	Potential impacts to public health and safety will be further addressed in Exhibit 15 of the Certificate Application.
102	Behnke, H. (DPS)	102.103	DPS Staff notes that the analysis and assessment of shadow flicker impacts should also apply to any officially-announced, planned land use developments, such as residential sites or community buildings, under review or already approved for site plan development or building permit issuance at the time of filing the Article 10 application.	Lighthouse Wind will identify planned subdivisions and developments within the shadow flicker study area and include these locations within the shadow flicker study and the Certificate Application.
102	Behnke, H. (DPS)	102.104	Explain whether the assessment of health effects from frequency of flicker will be based on the number of cycles per unit of time for a single turbine only (Hz) or on the combination of the cycles per unit of time (Hz) of a greater number of turbines, if they are aligned in such a way that they can simultaneously produce flicker on the same receptor location.	The shadow flicker model will take into account cumulative effects of having multiple turbines with the actual Project layout. The Certificate Application will provide review of the potential health effects of shadow flicker specific to the modeled results.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.105	PSS Section 2.9.3 states: "Because no state or federal standards or guidelines have been adopted regarding shadow flicker, the SFA will adhere to generally acceptable methods and thresholds of significance." Please indicate if there will be any other methods or thresholds of significance different than those described in this section. If so, please include them for discussion.	The shadow flicker analysis that will be included in the Certificate Application will describe in more detail the methods used and the basis of any thresholds of significance that are applied.
102	Behnke, H. (DPS)	102.106	<p>PSS Section 2.9.3 also states that: "In order to conduct the SFA, the following information will be required:</p> <ul style="list-style-type: none"> <li>• A Project layout with information on the proposed turbine model and dimensions.</li> <li>• Information on the location of all occupied structures within the SFA Study Area (typically a 10- rotor diameter area around each turbine).</li> </ul> <p>Commenter states discussion of shadow flicker does not provide a detailed basis for establishing the study zone extent at 10 rotor diameters. Please provide a justification and discussion about proposed studies extent.</p>	<p>The U.S. Department of Interior's Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States indicates shadow flicker effects are dramatically mitigated at distances beyond 10 rotor diameters. Similarly, the Rhode Island Land-Based Wind Siting Guidelines and the Massachusetts Model As-of-Right Zoning Ordinance or Bylaw: Allowing Use of Wind Energy Facilities state "the impacts of shadow flicker diminish rapidly with distance and should be minimal at 10 or more rotor diameters." This standard is commonly used on projects in New York State as well as in other states and countries.</p> <p>See: U.S. Department of Interior. 2005. Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States. <a href="http://windeis.anl.gov/documents/fpeis/maintext/Vol2/Vol2Complete.pdf">http://windeis.anl.gov/documents/fpeis/maintext/Vol2/Vol2Complete.pdf</a></p> <p>Massachusetts Executive Office of Environmental Affairs - Department of Energy Resources. 2012. Model As-of-Right Zoning Ordinance or Bylaw: Allowing Use of Wind Energy Facilities. <a href="http://www.mass.gov/eea/docs/doer/green-communities/grant-program/wind-model-bylaw-mar-2012.pdf">http://www.mass.gov/eea/docs/doer/green-communities/grant-program/wind-model-bylaw-mar-2012.pdf</a></p> <p>Rhode Island Office of Energy Resources. 2016. Rhode Island Land-Based Wind Siting Guidelines (Proposed). <a href="http://www.energy.ri.gov/documents/landwind/WindSitingDoc_2016-1-6_FINALforPublicReview.pdf">http://www.energy.ri.gov/documents/landwind/WindSitingDoc_2016-1-6_FINALforPublicReview.pdf</a></p>
102	Behnke, H. (DPS)	102.107	<p>PSS Section 2.9.3 states that the following information will also be required in order to conduct the SFA:</p> <ul style="list-style-type: none"> <li>• National Oceanic and Atmospheric Administration (NOAA) data on the historic sunshine probabilities of the nearest weather station.</li> <li>• Site-specific information related to topography (USGS digital elevation models), vegetation (USGS land use/land cover data), and wind direction frequencies (obtained from Project meteorological towers).</li> </ul> <p>1) Specify the difference in vertical elevations between two adjacent contour lines (Resolution). 2) Specify if vertical resolution is appropriate for modeling purposes. 3) Specify the location and height above ground proposed for the evaluation of flicker.</p>	The shadow flicker analysis that will be included in the Certificate Application will describe in more detail the data used for the analysis and the model input parameters as they are applied.
105	Dudley, S.	105.1	Commenter discusses PSS Section 2.9 and the attachment from ESS showing towns were contacted for input on identifying visually sensitive resources for the VIA. The commenter states that in their opinion the most visually sensitive resources is the Lake Ontario Shoreline, as it brings tourists, fishermen, summer residents and retirees for the quiet rural environment. Commenter also notes that only 4 town responses to ESS shows a lack of comprehensive assessment and no residents were contacted regarding their opinion on visual impact to their neighborhood.	Viewpoint selection is based upon input from public comments, municipal planning representatives, DPS, DEC, OPRHP, and APA. Lighthouse Wind will evaluate potential visual impacts on the shoreline community in the Certificate Application and a representative view will be included in the viewshed simulations.
109	Phillips, J.	109.1	Commenter asks that Lighthouse Wind designs another flier with actual pictures of the areas along Lake Ontario in the Towns of Somerset and Yates where these turbines are anticipated being erected and, with the aid of technology, place pictures of these 70 turbines in these projected locations and send the flier out to the residents of these communities. Commenter requests to be informed when the requested new flier is sent out.	The Certificate Application will include visual simulations of impacts from sensitive and representative receptors throughout the Project site.
111	Jarvis, C.	111.17	In regards to PSS Section 2.9.5, commenter believes wind turbines may be placed on all 4 sides of their house and asks how mitigation measures will solve this. Commenter asks if wind turbines will be tall enough to require flashing lights, how Lighthouse Wind will prevent them from being a nuisance.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighting for wind turbines is specified by the FAA lighting standards Advisory Circular AC No: 70/7460-1L and will include the lighting of turbines with FAA approved, red flashing lights directed upward to maximum pilot visibility and minimize visibility to viewers at lower elevations. A lighting plan will be developed to incorporate these requirements. All outdoor lighting on Project buildings will be downshielded. To preserve dark skies, Lighthouse Wind will limit hazard lighting to the minimum number of lights at the minimum intensity required by the FAA. Additional information, including mitigation measures for visual impacts will be discussed in Exhibit 24 of the Certificate Application.
DMM25	Gardner, J.	DMM25.1	Commenter includes photo from the top of the Golden Hill State Park Lighthouse. Commenter notes that the MET tower (190 ft.) can be seen in the photo. Commenter notes that 570' industrial wind turbines directly across from the NY taxpayers financed park will impact Golden Hill State Park, the park visitors, campers, effect on wildlife, Seaway Trail, and historic Landmark lighthouse.	Golden Hill State Park/Campground and the Seaway Trail have been identified as visually sensitive locations and will be included in the assessment and discussed in Exhibit 24 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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DMM34	Phillips, J.	DMM34.1	<p>Commenter believes that industrialization does not belong in people's front, side and back yards; on our "flat" terrain; on our farms and in our historic community. The massive size and height of these proposed turbines and the flat landscape of our area will not allow them to blend in or be invisible but, rather, they will be seen for miles and miles just as our SINGLE local coal plant stack can be. Multiply the existence of this ONE massive coal plant smokestack by upwards of 70 times and place them in locations in the midst of residential homes; historical landmarks; start park; lake shore cottages and homes; natural habitats for wildlife; and a normal flight route for our local military base, Mercy Flight, and border control and this is what we're being TOLD by Article 10, and by the proponents of this Project, to accept, ignore and sacrifice.</p> <p>Commenter suggest, with the technology available today, it would be very easy to take pictures of our area and, with the aid of technology, place images of these wind turbines on the pieces of property they plan to put them in the Towns of Somerset and Yates.</p>	<p>Comment noted. Visual simulations will be presented in the Certificate Application under Exhibit 24. These simulations will use photographs taken from representative viewpoint locations to simulate the appearance of the wind turbines in the Project setting. Viewpoint selection is based upon input from public comments, municipal planning representatives, DPS, DEC, OPRHP, and APA. The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project. The Visual Impact Assessment scope has been included as Appendix G to this response document.</p>
DMM67	Wayner, R. (Somerset Town Councilman)	DMM67.1	<p>Commenter is opposed to the Project and cites visual impact as one reason. States that the local viewshed would be destroyed by the Project. Topography and the populated lakeshore will result in significant adverse visual impacts.</p>	<p>The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project.</p>
DMM73	Lewicki, D.	DMM73.2	<p>Commenter states since the turbines are going to be somewhere beyond 550 ft. high and since the topography of the region is very flat, the viewshed study region of 10 miles is woefully underestimated. Commenter states that given the estimated heights of these turbines, the viewshed study region should be expanded significantly to 30 miles beyond the study region. These turbines will affect a far larger geography than stated by Lighthouse Wind.</p>	<p>It is possible the Project will be visible beyond 10 miles. However, previous visual studies and public guidance documents suggest that visual impacts are significantly mitigated as distance increases. Additionally, due to the relatively level terrain in this area, forested and developed areas serve to screen the facility much more effectively than in a highly variable terrain landscape. The viewshed analysis that will be presented in the Visual Impact Assessment will document the potential viewer locations where turbines could be visible and similarly will show areas where they will not be visible.</p>
DMM84	Bronson, C.	DMM84.1	<p>Commenter notes that the Project Area, has beautiful dark skies (at night) that are gathering points (esp. Golden Hill State Park) for stargazers from near and far (especially Buffalo) and is concerned that the turbines (600-foot strobe light flashing towers) would take away from this natural resource. Commenter indicates NY state does not designate dark sky areas but other places such as Canada do and NY state should would to preserve these resources.</p>	<p>Lighting for wind turbines is specified by FAA lighting standards Advisory Circular AC No: 70/7460-1L and will include the lighting of turbines with FAA approved, red flashing lights directed upward to maximum pilot visibility and minimize visibility to viewers at lower elevations. Lighthouse Wind will discuss the potential of nighttime visual simulations during the stipulation phase of the Project.</p>
DMM106	Arlington, T.	DMM106.1	<p>Commenter is concerned about Visual Impact analysis. RE: NYSDEC (2000) guidance, "Is "perceived beauty" going to be determined by the siting board and not the local citizens?"</p>	<p>The reason for conducting the Visual Impact Assessment is to address the potential visual impacts of the Project. The analysis will be conducted in accordance with the requirement of Article 10 regulations which provide for public input during the process and the NYSDEC Visual Policy, 2000 will be used as additional guidance.</p>
<b>Effect on Transportation (PSS Section 2.10/Application Exhibit 25)</b>				
21	Spitzer, D. (Attorney for Town of Yates)	21.7	<p>The PSS acknowledges that the Niagara Falls Air Reserve Station has operational air space within the vicinity of the Project site. Town requests Lighthouse Wind should perform a study to determine what impact, if any, construction and operation of the Project will have on the operation of that military installation.</p>	<p>Lighthouse Wind will consult with FAA and DOD, and an assessment of potential impacts to military flight operations will be included in the Certificate Application.</p>
95	Vacco, D. (Town of Somerset)	95.47	<p>Regarding PSS Section 2.10, the commenter states the PSS does not adequately address the prospect of encroachment on flight operations from the Niagara Falls Air Reserve Station (NFARS). The commenter includes a DOD planning tool (exhibit 13) as proof of impact on military operations. Commenter continues that encroachment on the NFARS could lower ratings in the next BRAC review and result in a closure of the base. Commenter references other letter (<b>Letter ID 23</b>) from retired Colonels regarding the encroachment issue and Congressman Collins (Exhibit 8) with the same concerns. The commenter concludes the Project Scope should include an in-depth, unbiased study of the Project's likely impact on NFARS as a viable base, as well as NFARS ability to withstand future BRAC scrutiny.</p>	<p>As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The DOD has a systematic process for reviewing project information, which is defined in Part 211 of Title 32 of the Code of Federal Regulations (<a href="http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5">http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5</a>). Lighthouse Wind would also like to note that the area shown to overlap military use and the Project in the DOD planning tool presented by the Commenter has an altitude limitation of at least 1400 feet, well over the proposed height of the turbines.</p> <p>With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. The events leading up to the Base Closure and Realignment Committee to decide to close a base are based on many complicated and varied factors, none of which involve proximity to a wind farm project. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore, there is no basis to consider the potential closure of the basis and the economic consequences as it does not relate to the development of the wind project.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.48	Regarding PSS Section 2.10, commenter states the PSS raises the highly concerning prospect that “[p]roject construction may require modifications to constraining features such as ... bridges ....”. Lighthouse Wind should conduct a study of optimal transportation routes, and provide a detailed list of bridges that will need to be modified in the course of the Project. If historic structures and bridges are to be modified, Lighthouse Wind should describe the process for approval of the same as part of the PSS, and ensure all necessary stakeholders have been notified.	The Certificate Application will include a Route Evaluation and Transportation Impact Study which will identify optimal proposed routes (in consultation with NYSDOT, Highway Departments in the Towns of Somerset and Yates, the Niagara County Department of Public Works, and the Orleans County Highway Department, as well as local school districts). Anticipated modifications to roadways and or bridges will be documented and any required approvals to make modifications will be outlined in the Certificate Application and would be acquired prior to construction activities.
95	Vacco, D. (Town of Somerset)	95.E9.29	Regarding PSS Section 2.10, commenter states the final constructed project will not generate large quantities of traffic, but it will create problems during construction, and after construction for automotive and non-automotive transportation.	Mitigation measures for construction impacts to traffic (vehicular and non-vehicular) will be addressed in the Certificate Application. It is anticipated that County and Town road agreements will have procedures for accessing existing road conditions following construction and plans to repair potential damages to roadways caused by vehicles during construction.
95	Vacco, D. (Town of Somerset)	95.E9.30	Regarding PSS Section 2.10, commenter states construction vehicles and delivery routes must be clearly identified and impacts to these roadways analyzed. Impacts include damages, improvements and modifications to road structures, drainage systems, infrastructure within the roads, vegetation along the roads, signage, traffic control structures, bridges, culverts, etc. Methodologies for coordinating this analysis with Town, County, New York State and Federal agencies need to be identified.	As noted in the PSS, route evaluations and mitigation measures will be carried out in consultation with the NYSDOT, Highway Departments in the Towns of Somerset and Yates, the Niagara County Department of Public Works, and the Orleans County Highway Department, as well as local school districts regarding bus routes. Coordination with these stakeholders will allow specific concerns to be identified and evaluated.
95	Vacco, D. (Town of Somerset)	95.E9.31	Regarding PSS Section 2.10, commenter states Mitigation Plans must include determinations on whether modifications to roadway systems will be left in place or returned to original conditions.	Design plans will be completed for any necessary public road improvements and/or modifications and will be provided to the affected jurisdiction for review prior to the initiation of construction activities. Determinations as to temporary or permanent nature of such modifications will be made by affected jurisdictions at that time.
95	Vacco, D. (Town of Somerset)	95.E9.32	Regarding PSS Section 2.10, commenter states the studies must include the results of meetings with NIMAC and how the Project will impact the air base at the Niagara Falls Airport.	Discussions and/or meetings between Lighthouse Wind and the NIMAC (Niagara Military Affairs Council) or its representatives will be summarized and results of such discussions incorporated into analyses and evaluations of the effects of the Project on military training or operations based out of NFARS to be included in Exhibit 25 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E13.1	Exhibit includes DOD Preliminary Screening Tool printout dated 6/2/2015.	Exhibit noted.
95	Vacco, D. (Town of Somerset)	95.E14.1	Exhibit includes DOD Preliminary Screening Tool printout dated 6/2/2015.	Exhibit noted.
102	Behnke, H. (DPS)	102.108	Regarding PSS Section 2.10, early consultation with the various Highway Departments including State, County, Town, and Village is encouraged.	The PIP activities log will continue to provide regular updates on meetings with the various highway departments and Lighthouse Wind will continue to meet with various highway supervisors throughout the Article 10 process and prior to construction.
102	Behnke, H. (DPS)	102.109	Provide a description in the application of any anticipated road closures or detours that may be required during construction; provide all necessary Maintenance and Protection of Traffic (M&PT) Plans in the application.	The requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.110	Page 68 of the PSS notes that: “These roads range from two-lane highways with paved shoulders to seasonally maintained roads .... The majority of the remaining roads in the Project site are classified as local roads....” In the application, provide a list of these roads (local and seasonally maintained roads) and the locations within the Project site. Also, provide an estimated total length and typical width of seasonally maintained and “local” roads within the Project area. Provide a description of how Lighthouse Wind plans on utilizing these roads for hauling and/or installing electric cables. Give consideration to narrow “local” and seasonally maintained roads that may need significant upgrades to accomplish these activities. If necessary and achievable, provide an explanation of how cable routes can be accomplished without traversing local roads.	The requested information will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.111	Page 68 of the PSS states that “In addition to vehicular traffic, roads within the Project site receive pedestrian and horse-drawn carriage traffic generated by local Amish and Mennonite communities.” It is also noted that portions of roads within the Project site are used for a “suitable” level of bicycle service. Provide an explanation in the application on how Lighthouse Wind plans on maintaining a suitable travel way for the above noted uses during trenching for cable installations.	As stated in the PSS, the Project could result in minor delays for motor vehicles, bicyclists, pedestrians, and horse-drawn carriages along delivery routes. Any delays experienced would occur only when roads are being used by OS/OW vehicles. The transportation routing plan will be designed to avoid or minimize safety issues associated with the use of approved haul routes and will confine OS/OW travel to select roads. This will likely include the use of escort vehicles, flagmen, and/or temporary signals to assure safe passage of vehicles, bicycles, pedestrians and horse-drawn carriages on public roads. The Certificate Application will further address Maintenance and Protection of Traffic (MPT). MPT plans will likely be required under future separate Highway Work Permit submittals to the NYSDOT, Niagara County Department of Public Works, Orleans County Highway/Buildings and Grounds Department, and the Towns. Once plans and permits have been approved further information will be provided.

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102	Behnke, H. (DPS)	102.112	Discussions should be included regarding sensitivity of horses to construction activity along with potential mitigation measures. Include a mitigation plan in the Application. DPS Staff advises that coordination be sought with the affected communities for this issue.	As stated in the PSS, the Project could result in minor delays for motor vehicles, bicyclists, pedestrians, and horse-drawn carriages along delivery routes. Any delays experienced would occur only when roads are being used by OS/OW vehicles. The transportation routing plan will be designed to avoid or minimize safety issues associated with the use of approved haul routes and will confine OS/OW travel to select roads. This will likely include the use of escort vehicles, flagmen, and/or temporary signals to assure safe passage of vehicles, bicycles, pedestrians and horse-drawn carriages on public roads. The Certificate Application will further address Maintenance and Protection of Traffic (MPT). MPT plans will likely be required under future separate Highway Work Permit submittals to the NYSDOT, Niagara County Department of Public Works, Orleans County Highway/Buildings and Grounds Department, and the Towns. Once plans and permits have been approved further information will be provided.
102	Behnke, H. (DPS)	102.113	It is noted that a Route Evaluation and Transportation Impact Study will be completed for this Project. Provide this study in the application.	The requested Study will be completed and included in the Certificate Application.
102	Behnke, H. (DPS)	102.114	Environmental, utility interactions and other aspects of improvements to highway infrastructure for hauling routes must be addressed in the application.	The requested information will be included with the Certificate Application.
102	Behnke, H. (DPS)	102.115	On page 72 of the PSS, it is noted that "It is anticipated that County and Town road use agreements will be developed in consultation with the Highway Departments in the Towns of Somerset and Yates as well as the Niagara County Department of Public Works and the Orleans County Highway Department." Provide regular updates to Staff regarding this consultation.	Lighthouse Wind will work to provide updates to DPS staff regarding road use agreements with Town, County, and State Highway Depts.
102	Behnke, H. (DPS)	102.116	Submit with the Application, an inspection report regarding load bearing and structural ratings.	As per the PSS and Application requirements, a Route Evaluation and Transportation Study will be completed in which conditions of roadway pavements are evaluated and any published structural road rating designations will be identified. Structural inspections will be determined and conducted on an as needed basis.
102	Behnke, H. (DPS)	102.117	Provide existing roadway condition reports in the Application.	Existing roadway conditions will be analyzed in conjunction with an analysis of the existing road systems to accommodate traffic and construction equipment. Lighthouse Wind will provide these reports in Exhibit 25 of the Certificate Application.
102	Behnke, H. (DPS)	102.118	Department of Defense (DOD) Clearinghouse Review online screening tool indicates that tall wind turbine structures located within the Project area potentially conflict with use of Military Operations Airspace. DPS Staff recommends that consultation with DOD should be on-going from development of Project Scope through development of Project layout and identification of the Project Site. DPS should be kept apprised of consultation status and recommendations.	Lighthouse Wind will consult with DOD and keep DPS Staff apprised of the results of these consultations. The Certificate Application will include a statement that the Project has received both an informal and formal review (by DOD) of the proposed construction of the Project in accordance with 32 Code of Federal Regulations, Sections 211.6 and 211.7.
104	Spitzer, D. (Attorney for Town of Yates)	104.3	The Town believes Lighthouse Wind should also perform a study to determine what impact, if any, construction and operation and maintenance of the Project will have on general aviation, crop dusters, Mercy Flight, State Police and Border Patrol aviation (including drones), and operations to and from Tiger Paw Airfield.	An analysis and evaluation of the impacts of the facility on airports and airstrips (including the Tiger Paw Aerodrome) will be included in Exhibit 25 of the Certificate Application. Lighthouse Wind will consult with FAA and DOD, and an assessment of potential impacts to flight operations from civilian and military flights will be included in the Certificate Application. Lighthouse Wind will also consult with the operators of such airports and heliports that are non-military facilities, and will provide a detailed map and description of such construction or alteration to such operators, and request review of and comment on such construction or alteration by such operators.
DDM37	Atwater, A.	DMM37.3	Commenter questions interference to the Local Air force base, Niagara County's largest employer, and interference with Mercy Flight for life saving measures. Commenter notes to remember there is no hospital within 25 miles of the area and communication is a vital source to save people in a life or death moment.	<p>Lighthouse Wind will consult with FAA and DOD, and an assessment of potential impacts to military operations and airspace will be included in the Certificate Application. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). In addition, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.</p> <p>Lighthouse Wind will include an assessment of potential impacts to military and Mercy Flight operations in the Certificate Application. Lighthouse Wind is planning on conducting consultation with Mercy Flight to better understand their operations and potential conflicts, if any, with Project and how they may be best resolved.</p> <p>To that respect, conversations with Mercy Flight have taken place on the following dates:</p> <ul style="list-style-type: none"> <li>- January 19, 2016 call to Director of Flight Operations Marc Boies</li> <li>- January 23, 2016 called about arranging meeting</li> <li>- January 26, 2016 spoke with Marc Boies.</li> <li>- January 27, 2016 met with representatives of Mercy Flight at their headquarters in Buffalo.</li> </ul>

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM61	Ray, M.	DMM61.1	Commenter questions the impact on Toronto, Buffalo, Rochester, and Niagara Falls air travel, as well as border control helicopters surveying the air space daily, Mercy Flight approaches from Buffalo, and the pilot training in low air space from the Niagara Falls airbase. Commenter is concerned on Mercy Flight due to no longer having a hospital nearby, border control activity to protect from terrorist situations, and Niagara Falls airbase for both training and service and as the largest employer in Niagara County.	<p>Lighthouse Wind will consult with FAA and DOD, and an assessment of potential impacts to military operations and airspace will be included in the Certificate Application. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). In addition, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.</p> <p>Lighthouse Wind will include an assessment of potential impacts to military and Mercy Flight operations in the Certificate Application. Lighthouse Wind is planning on conducting consultation with Mercy Flight to better understand their operations and potential conflicts, if any, with Project and how they may be best resolved.</p> <p>To that respect, conversations with Mercy Flight have taken place on the following dates:</p> <ul style="list-style-type: none"> <li>- January 19, 2016 call to Director of Flight Operations Marc Boies</li> <li>- January 23, 2016 called about arranging meeting</li> <li>- January 26, 2016 spoke with Marc Boies.</li> <li>- January 27, 2016 met with representatives of Mercy Flight at their headquarters in Buffalo.</li> </ul>
<b>Effect on Communications (PSS Section 2.11/Application Exhibit 26)</b>				
10	Erie County Legislature (Mills, Rath, Morton & Dixon)	10.1	Commenter opposes the Project due to the potential threat of interference with military radar and flight operations due to proximity to the Niagara Falls Air Force Reserve Station (NFARS).	As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). In addition, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
49	Wolanyk, E.	49.7	<p>Commenter notes that the PSS claims that certain exhibits do not apply including Exhibit 40. Commenter notes however, that in order to initiate startup of the turbines from an off position when winds are too low or when shut down when winds are too fast, control their facing into the direction of wind as it changes directions, and stop the turbines to prevent their overspinning when winds are too high, there needs to be communication with each industrial wind turbine. Also, communication with the electrical grid when the turbines are operational and electricity is flowing to the grid or when they shut down and electricity ceases needs to be communicated to the grid to maintain a constant electricity supply so that power surges or brown outs do not occur. Commenter also notes that the PSS makes statements on page 16 that verifies that communications from each turbine to a central location must be included in this Project. Commenter concludes these communications must be wireless or wired to connect to each of the 60-70 turbines.</p> <p>Commenter also notes that impact on local telecommunications will be impacted and should be addressed both for cell phone access, wireless Internet access, television reception, WIFI in businesses and homes, and radio communications for emergency vehicles needs to be addressed.</p>	<p>Lighthouse Wind will identify telecommunication equipment from the SCADA system to NYISO and/or control equipment in the O&amp;M building in Exhibit 40 of the Certificate Application. This will include a description of how Project operational data will be transmitted to the NYISO, and identification of communications methods proposed for the O&amp;M facility communication with the proposed generating facilities, any interconnected utility system owners and operators, any regional or national control center or system monitor, and with the public, including emergency responders.</p> <p>As stated in PSS Section 2.11.3, communications studies are planned for the Project and will be included in Exhibit 26 of the Certificate Application.</p>
49	Wolanyk, E.	49.37	In regards to PSS Section 2.11.5, commenter notes that during discussions with Lighthouse Wind it was acknowledged that cell phone reception, antenna television reception, radio reception and other communication technologies will most likely be negatively impacted during construction and operation of the industrial wind turbines. The Lighthouse Wind plan to address those impacts on an individual basis is insufficient. This area is too rural for cable to be provided to residents outside of the villages. Verizon Fios service is available to the school buildings alone and although the fiber optic cables pass in front of residences on rural roads they are not permitted to access that service. Lighthouse Wind should identify that it will make these services available to all residences and pay for those services for the duration of the Project and until the industrial wind turbine waste is removed. In other locales it is common for industrial wind turbine companies to pay for cable or satellite service installation and for one year of service. This is not acceptable.	The PSS does not state that there will most likely be negative impacts, but does acknowledge that there could potentially be some impacts. The results of the studies proposed in Section 2.11.3 and any potential impacts and mitigation of those impacts will be discussed in the Certificate Application. Potential mitigation, if any is required, will also be examined and discussed with affected parties.
51	Kahn, A. (Rochester Birding Association)	51.19	In regards to PSS Section 2.11.3, page 75, commenter notes another area for study is impact on Doppler radar since many rely on Doppler during lake snow events. Commenter asks whether the towers obscure weather conditions for the Project area the way the towers do around Bliss NY.	Lighthouse Wind will add a study to determine impacts, if any, to local Doppler radar systems. The results of the study and any anticipated impacts will be discussed in the Certificate Application and consult with affected weather agencies, if appropriate.
95	Vacco, D. (Town of Somerset)	95.49	Regarding PSS Section 2.11, commenter states the PSS fails to address how the Project might impact forecasting and tracking of lake effect snow bands over lake Ontario.	Lighthouse Wind will add a study to determine impacts, if any, to local Doppler radar systems. The results of the study and any anticipated impacts will be discussed in the Certificate Application and consult with affected weather agencies, if appropriate.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.50	Regarding PSS Section 2.11, commenter states Lighthouse Wind completely fails to acknowledge that the Project will have an impact on Military and Defense radars emanating from the nearby NFARS. (The commenter references Exhibit 14, a DOD preliminary screening tool, which states: "[i]mpact likely to Air Defense and Homeland Security radars. Aeronautical study required.") The PSS should be modified to call for a federal or Department of Defense study thoroughly analyzing the impact of the Project on operational and defense radars, as well as the potential for causing radar blind-spots within the MISTY -1 MOA, particularly for low altitude flight operations.	As stated in the PSS, The Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The DOD has a systematic process for reviewing project information, which is defined in Part 211 of Title 32 of the Code of Federal Regulations ( <a href="http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5">http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5</a> ). Additionally, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
DMM1	Botsford, R.	DMM1.1	Commenter is concerned with TV reception problems, as he currently uses over the air reception, not cable. He is concerned, as he currently receives and enjoys Canadian broadcasts that he could not receive with cable.	PSS Section 2.11.3 lists the communications studies planned for the Project. One of those studies mentioned includes Off-Air TV Analysis. Please see page 75 of the PSS for more information. These studies and any potential mitigation measures will be incorporated into Exhibit 26 of the Certificate Application
DDM37	Atwater, A.	DMM37.1	Commenter expresses concern over the limited communications of the area (lack of high speed cable, cell signals, radio signal and TV), and reliance on cell phones, satellites, antennas due to poor maintenance of land lines and availability of cable\high speed internet. Commenter notes it is important to consider interference from the turbines.	PSS Section 2.11.3 lists the communications studies planned for the Project. Please see pages 75 and 76 of the PSS for more information. These studies and any potential mitigation measures will be incorporated into Exhibit 26 of the Certificate Application
<b>Socioeconomic Effects (PSS Section 2.12/Application Exhibit 27)</b>				
4	Arlington, T.	4.1	Commenter expresses concern regarding the Project. What will be the effect of homes' values in the immediate vicinity of the turbines?	As stated in Section 2.12.3 of the PSS, property values will be evaluated by conducting a thorough literature search and presented in a Socioeconomic Assessment as part of Exhibit 27 of the Certificate Application.
4	Arlington, T.	4.2	Commenter asks what will be the effect on local businesses and tourism (particularly cottage rentals), as tourists typically choose to stay here for the tranquility and enjoyment of the lake?	As stated in Section 2.12.1.1 of the PSS, Lighthouse Wind recognizes that tourism is an important industry for this region. The Socioeconomic Assessment will evaluate the potential effects of the proposed Project on tourism and will be presented in Exhibit 27 of the Certificate Application.
10	Erie County Legislature (Mills, Rath, Morton & Dixon)	10.2	Commenter notes that encroachment on NFARS is a key factor when reviewing military bases for potential shut down, and as NFARS has been subject to multiple reviews for closure, feels that the Project may be an impediment to future operations.	Lighthouse Wind recognizes the importance of the NFARS to the regional community and economy, and will evaluate other similar operating wind projects within military installations as part of the Socioeconomic Assessment to be included in Exhibit 27 and Effect on Transportation in Exhibit 25 of the Certificate Application. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The DOD has a systematic process for reviewing project information, which is defined in Part 211 of Title 32 of the Code of Federal Regulations ( <a href="http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5">http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5</a> ). Additionally, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
12	Smiley, A.	12.5	Commenter discusses the need to consider socioeconomic resources such as tourists and summer residents and religious groups and community character and social environment of the area.	As indicated in Section 2.12 of the PSS, Lighthouse Wind will include an assessment of the local economy including tourism in the Socioeconomic Assessment which will be included as part of Exhibit 27 of the Certificate Application. Community character is scoped and described in Section 2.1 of the PSS and will be further addressed in Exhibit 4 of the Certificate Application.
14	Mullane, P.	14.2	Commenter notes general concern regarding negative economic impacts from Project.	The potential socioeconomic impacts associated with the Project will be further analyzed and discussed within Exhibit 27 of the Certificate Application.
15	Schwabel, P. and P.	15.1	Commenter requests the names of the property appraisers in Niagara or Orleans counties who support conclusions that property values will not be affected by Lighthouse Wind.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
15	Schwabel, P. and P.	15.2	Commenter requests Lighthouse Wind addresses studies done relative to properties that have extreme views (defined as views of the full height) of turbines.	Lighthouse Wind currently has not conducted a Visual Impact Assessment (VIA) to date. The scope of the VIA is explained in Section 2.9 of the PSS. The VIA will be appended to the Certificate Application and summarized in Exhibit 24. The VIA will present simulations from representative viewpoints throughout the Project site including views demonstrating the full height of turbines.
15	Schwabel, P. and P.	15.3	Commenter asks if Lighthouse Wind is prepared to offer a property value guarantee (PVG) and what methods are proposed to establish property values/	As discussed in response to other comments regarding property values, Lighthouse Wind will provide a literature review of the potential for impacts to property values associated with wind farms which generally have conclusively concluded that wind farms do not impact property values. Thus, at this time, there is no reason for Lighthouse Wind to consider a property value guarantee as such mitigation, even assuming it were feasible to mitigate potential impacts, is not necessary.
15	Schwabel, P. and P.	15.4	Commenter asks what Lighthouse Wind is prepared to do to guarantee property owners in Somerset and Yates the value of their properties both during and after construction of the largest turbines in New York State.	As discussed in response to other comments regarding property values, Lighthouse Wind will provide a literature review of the potential for impacts to property values associated with wind farms which generally have conclusively concluded that wind farms do not impact property values. Thus, at this time, there is no reason for Lighthouse Wind to consider a property value guarantee as such mitigation, even assuming it were feasible to mitigate potential impacts, is not necessary. The size of the turbines proposed for this Project does not alter the conclusions reached in the previous studies conducted regarding property values.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
15	Schwabel, P. and P.	15.5	Commenter notes given statement that property values are not affected by turbines, why do you think actual real estate professionals are not correct when they state that properties within wind farms lose 20-40% of their value?	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
17	Sokolow, A.	17.2	Commenter makes general comments about economic viability of project and reliance on subsidies and cutbacks. Also notes concern over economic impacts to community. Economic concerns include funds for inspections of road conditions (damages to roads) throughout lifetime of project, funds for special training of EMTs and emergency personnel.	Section 2.3 of the PSS evaluates the scope needed to assess local emergency responses needed for the Project and Section 2.12 presents the scope for the Socioeconomic Assessment including a road use agreement, to be completed and included in the Certificate Application.
23	Retired Airlift Wing Commanders Incorporated - Town of Somerset	23.1	Retired Airlift Wing Commanders note that the construction of the turbines could pose a serious encroachment threat to the MOA "Military Operating Area" at Niagara Falls Air Reserve Station (NFARS). Furthermore, by potentially encroaching upon the area the Project puts at risk the NFARS to "Base Realignment and Closure" (BRAC) as one of the main reasons the base has been saved from the BRAC program is its encroachment free MOA. Commanders note if the base were to close an estimated 3200 jobs would be lost, compared to 5-10 full time jobs gained for the Project. Current C-130 operations and certain high speed fighter aircraft maintain low level training routes (generally 500 ft. above ground level (agl)) but sometimes as low as 300 ft. agl on some routes within the Project Area.	As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the DOD and FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address the situation in a Socioeconomic Assessment as part of Exhibit 27 of the Certificate Application. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
27	Maid, G.	27.1	Commenter states the studies listed for consideration in the Certificate Application fall short in many areas. Areas of concern are as follows: 1. None of the study areas are from Western NY, or any area of the Country will similar attributes to those in the proposed Project area; prime farm land along a Great Lake. 2. Sterzinger and the 2 Hoen studies were opinions derived from data collected from as early as 1997 (nearly 20 years ago) all prior to and without consideration for the subsequent housing market crash that occurred during 2008-2010. None of the studies were for property in Western NY, where housing prices were affected by to a lesser extent than other parts of the country. 3. Three of the studies were conducted as master theses by a graduate student. 4. None of these studies were conducted by an impartial, independent organization. All five of the studies were provided by persons or organizations that are considered, by historical and documented positions, to be "pro wind." One study has a large portion of its listed resources being the American Wind Energy Association, lobbyist for wind farm developers. 5. Only one of the five studies was conducted by persons holding credentials that give them expertise in land appraisal and real estate economics. 6. Hoen has been publicly criticized for skewed or omitted data that did not fit his intended findings, along with being biased and unqualified. 7. All of the studies, did not say that wind farm development had no effect on property values. They all, in sum and substance, did not describe development as having no impact, only "no statistically significant impact on sale prices". These studies are so out of balance as to render them unusable in a setting and system that is allegedly designed to be fair and truthful.	Lighthouse Wind will complete a literature search of property value studies conducted at existing/operating wind farms and include the results in the Certificate Application.
32	Kohlman, R.	32.2	Commenter states that property values will be affected, stating anyone can produce a study to support one side or the other of an argument. Commenter personally listed their cottage 'for sale' last year and was unable to sell even after dropping the price. The commenter claims their realtor is suggesting lowering the price further this year because of the threat of the windfarm. Commenter notes that the 'for sale' sign is posted amongst all of the anti-windfarm signs along West Lake Road, so they are dropping the price further and will lose money on the sale. Commenter states this is a real financial impact already just from the threat of the windmills. The proposed windfarm directly attacks the purpose for owning this cottage, i.e. a natural weekend haven and a financial instrument.  Further, the commenter states the Project does not compensate them in any way for their losses and Lighthouse Wind does not address this other than to say there is no loss.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values.
32	Kohlman, R.	32.3	Regarding PSS Section 2.12.2.2, commenter notes that the scoping statement discusses economic benefits to the community, leasing landowners being a major beneficiary, but those people who live across the street and have to live with the negative impacts every day are not discussed or compensated in any way for their loss. There are general payments to taxing jurisdictions but no indication that those who are most affected are compensated in any way.	The Socioeconomic Assessment will evaluate the potential benefits to various stakeholders and be presented in Exhibit 27 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
45	Stockman, G.	45.6	Commenter notes that although Figure 2 is cited in the Cultural Resources section, Figure 5 gives a much better sense of the cultural attractions in the area. It is not only buildings shown but the parks and waterways that have sustained the cultural interest in this area. Commenter believes that interest will be damaged by the project, stating that this is an agricultural and recreational area and the Project is an industrial installation.	Figure 5 displayed preliminary aesthetic resources. "Cultural/archeological resources" within the Project site will be identified in Exhibit 20 of the Certificate Application. "Cultural attractions" such as recreational and other land uses including Wild, Scenic and Recreational River Corridors, open space, and any known archaeological, geologic, historical or scenic area, park, designated wilderness, forest preserve lands, scenic vistas specifically identified in the Adirondack Park State Land Master Plan, conservation easement lands, scenic byways designated by the federal or state governments, nature preserves, designated trails, and public-access fishing areas; etc. will be identified on maps within Exhibit 4 (Land Use) of the Certificate Application. In the event any of these areas are impacted by Project facilities the Certificate Application will also spell out how such impact is avoided or, if unavoidable, minimized or mitigated.
47	Salmons, S.	47.2	Commenter is not only concerned about their property values, but asks what the turbines will do to the property values of the people who lease, and questions if this is the legacy they want to leave to this community and their families.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
47	Salmons, S.	47.4	Commenter notes that the breakdown of the payments that need to be shared by many recipients leaves the Town of Yates receiving very little.	Further details regarding economic considerations of the Project, including a breakdown of real property taxes, benefit assessments, user fees, or payments in lieu of taxes to each presiding jurisdiction will be provided within Exhibit 27 of the Certificate Application.
47	Salmons, S.	47.6	Commenter notes that they would like to retire in Yates as they sold their home in Lockport, but they do not want to stay in Yates if this Project goes in. Commenter asks about what a decrease in property values do to the tax base? Will Lighthouse Wind make up for that? Will they even stick around to take care of their project?	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values.
49	Wolanyk, E.	49.10	Regarding PSS page 6, commenter states Lighthouse Wind does not address the loss of thousands of jobs that may occur if the building industrial wind turbines interferes with the Niagara Air Base continued operation or prevents the expansion of its mission because of the interference of 70 - 600 foot industrial wind turbines in their flight path. Commenter states 13 local full time jobs will not make up for that loss to the county.  Commenter also notes that the PSS indicates that 300 full-time construction jobs will be created benefitting the local communities, employ residents and tax base. However later in the PSS (Section 2.12.2.1) Lighthouse Wind disagrees with its own statement stating construction jobs are not likely to result in a significant increase to permanent resident populations.	As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address this topic in a Socioeconomic Assessment as part of Exhibit 27 of the Certificate Application.  The intent of the statement regarding employment is to explain that while local people will be employed, some may come from outside the area. Those that do come from outside the area would be there just for the construction phase, thus not adding to the burdens of the community through permanent relocation and utilization of municipal services.
49	Wolanyk, E.	49.11	Commenter states the Town of Somerset has no hotels or motels only a couple of small restaurants. As far as purchasing local supplies and goods while construction is underway, the same holds true. Somerset and Barker have no lumber or hardware stores, no gravel pits or cement plants. No industrial wind turbine components are created or built here. As far as the benefit to the tax base, a PILOT that represents 25 -30% of the actual taxes that could be levied will benefit the county IDA- not the county and the school districts must stay under a New York State imposed 2% tax cap increase so no benefit will accrue there. While the town taxes may decline, they represent a small percent of the property taxes (only 5-15%). In other New York State counties, school boards are passing resolutions to reject PILOT agreements for this and other reasons. In counties with industrial wind turbines such as Wyoming County, the county taxes have been raised year after year following industrial wind turbine installation, which has resulted in an overall increase in property taxes. Commenter believes this proposed benefit to the community should be stricken from the PSS, as it is misleading. Instead, commenter believes Lighthouse Wind should commit to paying taxes on the structures instead of seeking a PILOT. This would actually benefit the county, school and local government.	No PILOT payments would benefit the County IDA – the IDA has pass-through involvement only and the payments directly benefit the involved tax jurisdictions and add significant new revenue streams (with budgeting certainty) for each of them. While New York's property tax cap counts PILOT payments the same as tax payments for purposes of calculating the allowable tax levy increase of a jurisdiction, entry into a PILOT agreement does not adversely impact any of the tax jurisdictions for levy increase purposes, because new PILOT revenue from the wind project diminishes the portion of any levy increase that would come from other taxpayers.  The range of typical Town taxes (as a percentage of the whole) is correctly stated, but the PILOT would create new revenue streams for ALL involved tax jurisdictions. Whether tax rates are reduced will depend in large part on budgeting decisions the tax jurisdictions make regarding the new revenue.  In regard to other taxing jurisdictions rejecting PILOTS, this statement is not true. School boards may have decided to opt out of the Real Property Tax Law exemption for wind energy projects, but many who have done so have later either opted back in to the exemption to support a PILOT agreement for a wind project or have supported an IDA PILOT for a wind project. School Districts typically support wind project PILOT agreements because they create new revenue streams (with budgeting certainty) and do not create additional demands for School District services.  As indicated in an earlier response, whether the new revenue streams created by wind project PILOT agreements end up resulting in reduced tax rates is most influenced by tax jurisdiction decisions concerning their budgets and how to spend the new sources of revenue.  Further details outlining economic concerns expressed herein will be provided in Exhibit 27 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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50	Atwater, R.	50.10	In PSS Section 2.1.2.2, commenter notes Lighthouse Wind asserts "Wind projects provide a potential means of reversing the trend of farm abandonment and preserving the rural/agricultural character of many areas." In the towns of Somerset and Yates, commenter notes that there has been considerable expansion of several farms in recent years, including three large dairy farms within a mile either side of County Line Road that have expanded dramatically in the past several years. In recent years, commenter notes that they have seen more land cleared for farmland, not abandoned.	Project impacts on agricultural areas will be further discussed and outlined in Exhibits 4 and 27 of the Certificate Application.
51	Kahn, A. (Rochester Birding Association)	51.16	Regarding PSS Section 2.1.1 Page 10, commenter notes Golden Hill and Lakeside State Parks also have bird watching year round. Bird watching tourism brings large dollars into a community and Rochester regularly hosts international birds attracted to the southern shore of Lake Ontario to watch migrations.	Tourism and the socioeconomic Impacts of the Project on tourism will be addressed in Exhibit 27 of the Certificate Application.
63	Beitelshees, C.P. and J.H.	63.2	Commenter claims independent studies show an average plunge in property values of up to -26% when the turbine is from 1000 to 2100 feet away, and -25% diminished when the property lies within 1.8 miles of these huge steel structures and in existing wind projects like the ones in Wyoming County, some homes have been reported as "not Salable" because of their proximity to wind turbines, as referenced in <a href="http://www.scribd.com/doc/23858548/Ago-Wind-Turbine-Propertv-Value-Impact-Studv">http://www.scribd.com/doc/23858548/Ago-Wind-Turbine-Propertv-Value-Impact-Studv</a> .	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.1	Commenter focuses on study by Ben Hoen on residential property values. Commenter claims the study appears to be a regurgitated version of the December 2009 study, and therefore provides nothing new.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.2	The commenter notes that Hoen claims to use about 7,500 sales, yet excludes certain sale data from nearby turbines, i.e., developer buyout and resales at 36% & 80% reduction upon resale. Commenter claims had just those two 2 sales been included, it would impact his "Nuisance" effect from about 5.3%-5.6% up closer to 10%.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.3	Commenter notes that the newer paper by Hoen excludes an earlier figure and suggests that it was intentionally left out as it was a negative finding. Commenter also suggests Hoen deviated from established rules to exclude inconvenient data. Commenter claims that data results do not reflect buyout properties that were unsellable, and 34 sales that were "valid" sales with no explanation for if they were resold for turbine nuisances or if they reflected discounting or appreciation between sales. Commenter claims Hoen also excluded 5 sales that were more than six standard deviations from the mean. Commenter states that if one is looking for an honest answer to turbine impacts, the excluded sales are exactly where the focus should begin, since they show considerable probability of having been impacted by the nearby turbines.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.4	Commenter claims that Hoen's opinions are misquoted in a misleading manner, stating that Hoen does not say there is no impact on value, but rather that there is no "statistically significant impact on sale prices". Commenter points out that when the inventory of houses available is significantly impacted by a large scale disamenity via acting as a deterrent to buyers, then often homes will sit on the market for extensive periods of time, usually referred to by Realtors as Days On Market (DOM). Numerous examples of unsold inventory demonstrate that turbines have exactly this effect on the majority of would be buyers, when the turbine presence is "dominant" or spoils natural view amenities. Examples of homes that sold after protracted marketing range from 20% to 40% value reduction after 2-3 years on the market, and further, the developer resales in the preceding Point 1 demonstrate that in order to obtain a more "typical" DOM, the prices need to be discounted even steeper...as much as 80%. Those discounted prices are value by definition, since that is what a willing buyer paid to a willing seller, neither being under compulsion to consummate the transactions. Thus, Hoen uses the absence of sale evidence to claim "prices" are not impacted in a statistically significant manner.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.5	Commenter also claims Hoen, in his 2006 thesis, made similar claims, but there is an absolute dearth of sale activity within about 3/4 to 1 mile of the turbine cluster in the Fenner project. Commenter calls this the "doughnut hole" effect, since if you stare at that map long enough the hole in the data becomes obvious. Commenter also notes Hoen states that data for marketing time (DOM) was not available, yet he has now had 6 years to thoroughly research and analyze DOM data, which can be printed out by any local Realtor via MLS statistics. Despite at least 2 new publications since his thesis, he has yet to report any MLS marketing time statistics. Commenter also notes that Hoen acknowledges that the Fenner area home values have decreased, which is confirmed by a local Realtor, but by adjusting the Township variable, his application of regression number crunching is able to make that effect go away, from his statistical perspective (See "Rubber Rulers", below) and that Hoen admits "second homes" (i.e., Nantucket, Cape Vincent, Wolf Island, etc.) are not analyzed at all. This exclusion carries forward through to the 2009 LBNL report and the latest version of that report currently making the rounds.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.

Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
82	McCann, M.	82.6	The commenter claims that Hoen's methodology is unreliable. Commenter refers to the article "Wind Farms, Residential Property Values, and Rubber Rulers". Commenter states that Al Wilson, a seasoned (now retired) and highly qualified real estate appraiser and an expert on the use of regression analysis for mass appraisal purposes, reviewed the 2009 Hoen/LBNL report and concluded that "the report should not be given any serious consideration for any policy purpose. The underlying analytical methods cannot be shown to be reliable or accurate". Commenter adds that the most authoritative appraisal text on evaluating detrimental conditions lists the 3 basic methods of determining property value damages from a neighboring cause, in descending order of reliability, as follows: 1) Case studies. The developer resales cited in Point 1 are a good example of case study type of data. 2) Paired Sales. See McCann Mendota Hills study – sales near (<2 miles) vs far (>2 miles) from turbines show a proximity effect averaging 25%. 3) Regression analysis. Problems with Hoen's use of this overall method and unproven model are stated clearly in the Rubber Rulers paper by Al Wilson. How statistics can be used to mislead is summarized clearly in the article by Dr. Alec Salt: "Why do pro wind studies often use a 10 km radius?" Finally, Hoen prepared the report for a branch of the Federal Government (USDOE), and the report is certainly a public document. Commenter also claims that Hoen has not provided raw sales data to peer reviewers, therefore the claim of "peer review" is also misleading, since scientific peer review includes the ability to review the author's data details to test the veracity of the conclusions.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.7	Commenter notes that Ben Hoen has had no professional real estate experience, and he holds no license to practice as an appraiser. Commenter states he has never been qualified in any court as a "property value" or "appraisal" expert, and reliance on his opinions is potentially a negligent act, similar to taking legal advice from a non-lawyer or medical advice from a student. Commenter states with the public at considerable risk of property value and equity losses, a generously compensated pro-wind advocate is the least reliable source for independent, professional advice or "expert" opinion publications upon which to base far reaching land use approval or policy decisions. Commenter also notes that the 2009 report states: "It should be emphasized that the hedonic model is not typically designed to appraise properties ...", however, The Hoen report is often used by developers to assert a claim that there is no impact on value from wind turbines which is, in fact, a value opinion.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.8	Commenter claims Hoen's recommendation for PVG's is contrary to the claim of no impact on property value, citing Hoen's May 2010 webinar suggesting that PVGs should be used to mitigate value loss risks, and written and recorded comments from a telephone interview by Clif Schneider, where Hoen admits developers misquote his opinions and report. Commenter also cites an AWEA 2011 policy report stating they are working on developing a PVG solution for wind project developers. Commenter states that there is a contradiction of recommending value guarantees if there are "zero" impacts on residential values.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
82	McCann, M.	82.9	Commenter claims Hoen had admitted to little knowledge of impacts within 1/2 mile of turbines, citing a presentation at the March 7, 2012, AWEA Midwest Summit, which suggested more research was needed and there was a lack of consistent evidence of post construction effects based on distance from or view of turbines in all models. Commenter states Hoen does not state there is no impact.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
87	Coates, W. and C.	87.2	Commenter notes that the area is near the Niagara Falls Air base, and asks if the Project will affect their radar, planes and helicopters?	As stated in the PSS, The Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1).
89	Woodrich, G.	89.4	Commenter claims power generation costs continue to skyrocket in New York because of senseless subsidies to worthless projects, stating in 1999 the NY residential average power rate was 13.3cents/KWH, now in 2015 it is 19.8cents/KWH. Commenter states these excessive power costs impact the poor significantly.	Further details documenting the socioeconomic impacts of the Project will be provided in Exhibit 27 of the Certificate Application.
90	Fuerch, D.	90.1	Commenter feels that large companies are not concerned with the side effects of their actions in a small community. Commenter states that big companies putting windmills in an area like Barker has disrupted a community before, such as the Maple Ridge Wind Project in the Tug Hill plateau caused families to be upset with each other and raised tensions between neighbors (NBC News, 2015). Commenter claims the "good neighbor" incentive made people upset that they didn't receive money but still had to deal with the windmills at the same cost and claims the Lighthouse project would do exactly this, driving the small town family raising community against each other.	Currently, Lighthouse Wind does not anticipate the placement of any wind turbines in the Village of Barker. Potential impacts on community character as result of the construction and operation of the Project will be discussed within Exhibit 4 of the Certificate Application.
90	Fuerch, D.	90.2	Commenter claims that windmills are financed as tax shelters and tax benefits to companies like Lighthouse Wind. Commenter quotes: "Assume a wind turbine has a payback of investment of say 10 years without subsidies; if it won't be maintained beyond the term of the tax shelter, nominally 5 years, it won't operate for 10 years. In real economic turns, it won't payback half of what it cost to build it. It won't produce the energy it took to make it" (Northrup, 2015). Commenter states that this can be interpreted to mean that wind farms are more likely to be built in the most favorable tax environment not the most favorable wind region.	Potential impacts from the construction and operation of the Project on the socioeconomic aspect of the community will be discussed further in Exhibit 27 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.6	<p>Commenter believes that Lighthouse Wind erroneously asserts that, industrial "wind facilities have no significant impact on property values." PSS at p. 87, and in accordance with this position, Lighthouse Wind has failed to outline any property value studies in the PSS.</p> <p>The commenter references their expert, M. McCann (Exhibit 7 to the letter), including that the PSS should be modified to include a property value study to be conducted to assess the Project's likely impact on property values and a guarantee of the property values of all property owners in the Project area, or at a minimum the PSS should be modified to include mitigation measures in the event property values are impacted.</p>	<p>As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values.</p>
95	Vacco, D. (Town of Somerset)	95.7	<p>Commenter states the PSS completely fails to address the Project's certain impact on the nearby Niagara Falls Air Reserve Station ("NFARS"), including the likely possibility of NFARS closing in the proposed Project scope. There is no discussion of the potential loss of 3200 jobs, no discussion of environmental justice or socioeconomic effects as they relate to the closing of NFARS, and no allowance for a base closure in the statement of need. Commenter believes there is no evidence that Lighthouse Wind has considered the possibility that NFARS could be closed as a direct and likely consequence of the Project's encroachment on NFAR's air space.</p>	<p>As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address this topic in a Socioeconomic Assessment and will be included as part of Exhibit 27 of the Certificate Application.</p> <p>With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. The events leading up to the Base Closure and Realignment Committee to decide to close a base are based on many complicated and varied factors, none of which involve proximity to a wind farm project. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore, there is no basis to consider the potential closure of the basis and the economic consequences as it does not relate to the development of the wind project.</p>
95	Vacco, D. (Town of Somerset)	95.51	<p>Regarding PSS Section 2.12, page 76, commenter believes Lighthouse Wind misrepresents housing as being widely scattered, generally modest homes, and should modify the PSS to include an accurate description of the high density of residential communities along the shore of Lake Ontario.</p>	<p>Residential communities and housing will be discussed in more detail within Exhibit 4 of the Certificate Application.</p>
95	Vacco, D. (Town of Somerset)	95.52	<p>Regarding PSS Section 2.12, commenter believes Lighthouse Wind completely fails to address the socioeconomic impact of the potential closing of the Niagara Falls Air Reserve Station. The Project Scope must be modified to include this eventuality, and its likely impact on jobs, tax revenue, population, and housing prices.</p>	<p>As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address this topic in a Socioeconomic Assessment and will be included as part of Exhibit 27 of the Certificate Application.</p> <p>With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. The events leading up to the Base Closure and Realignment Committee to decide to close a base are based on many complicated and varied factors, none of which involve proximity to a wind farm project. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore, there is no basis to consider the potential closure of the basis and the economic consequences as it does not relate to the development of the wind project.</p>
95	Vacco, D. (Town of Somerset)	95.53	<p>In regards to PSS Section 2.12, commenter states Lighthouse Wind cites heavily criticized studies in making the outrageous claim that "wind facilities have no significant impact on property values." PSS at p. 87. Commenter believes this statement is completely false, and the studies cited by Lighthouse Wind have been discredited as no more than wind industry propaganda pieces with little or no scientific value. The commenter cites their expert M. McCann (Exhibit 7 to the comment letter ) and public comments (Exhibit 15 to the comment letter) to this deficiency.</p>	<p>Lighthouse Wind respectfully disagrees with the commenters claim that the property value studies cited in the PSS have been discredited as propaganda. However, as stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be conducted and included in Exhibit 27 of the Certificate Application.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.54	Regarding PSS Section 2.12, commenter notes that Lighthouse Wind states: "[b]ecause [the Project] will not directly increase local municipal expenses, it will have no adverse impact on municipal budgets." PSS at 81. Somerset disagrees with this assertion as it completely fails to address either the expense or revenue aspects of the Town's budget. The Project Scope should be modified to include a detailed analysis of impact on the Town's expenses, including first responder, and highway costs, and any other costs associated with the actual location of the turbines. Even more importantly, Lighthouse Wind's assertion is misleading because it fails to account for the anticipated dramatic reduction in property values, and therefore tax assessments.	<p>Lighthouse Wind will prepare and submit a complete Certificate Application which includes scoped items covered under the Article 10 Regulations. Following the submittal of this document, commenters will be allowed an additional comment period to ask questions pertaining to the content of the Certificate Application. Meetings will be held with local first responders to determine their ability to respond to certain types of emergencies and an emergency response plan will be created and included in the Certificate Application.</p> <p>The Certificate Application will include a Route Evaluation and Transportation Impact Study which will identify optimal proposed routes (in consultation with NYSDOT, Highway Departments in the Towns of Somerset and Yates, the Niagara County Department of Public Works, and the Orleans County Highway Department, as well as local school districts). Anticipated modifications to roadways and or bridges will be documented and any required approvals to make modifications will be outlined in the Certificate Application and would be acquired prior to construction activities.</p> <p>As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values.</p> <p>This information will be provided in Exhibit 15 (Public Health and Safety) of the Certificate Application.</p>
95	Vacco, D. (Town of Somerset)	95.55	Regarding PSS Section 2.12, commenter states that Lighthouse Wind seems to be relying on development of a PILOT program. Commenter states that upon information and belief, neither Niagara County nor the Town of Somerset intend to agree to any such program at this time. As a result, Lighthouse Wind should show the anticipated taxes it will have to pay over the course of the Project.	As part of Exhibit 27 (Socioeconomic Effects) of the Certificate Application, Lighthouse Wind will identify taxing jurisdictions within which the Project would be located, and "any entity from which payments in lieu of taxes will or may be negotiated." 16 NYCRR § 1001.27(h). Further, Lighthouse Wind must provide, "for each jurisdiction, an estimate of the incremental amount of annual taxes (and payments in lieu of taxes, benefit charges and user charges) it is projected would be levied against the post-construction facility site, its improvements and appurtenances," and "For each jurisdiction, a comparison of the fiscal costs to the jurisdiction that are expected to result from the construction and operation of the facility to the expected tax revenues (and payments in lieu of taxes, benefit charge revenues and user charge revenues) generated by the facility." 16 NYCRR § 1001.27(i)-(j). If, at the time of the Certificate Application filing, a tentative plan for any PILOT agreement is being negotiated, the relevant materials and information related to that proposed PILOT will be included in the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.63	The commenter notes that comments specific to demographic, economic, and physical attributes of the local community are addressed elsewhere in their letter.	Comment noted.
95	Vacco, D. (Town of Somerset)	95.E7.1	Commenter explains details of their review of the real estate evaluation in the PSS. Their conclusion is that the studies cited in the PSS are deficient with respect to the extent and quality of the information needed to address the adverse impact of large scale turbines located in relatively close proximity to neighboring residential uses. The commenter's assessment of the literature included in the PSS found faults with transparency of the data, data sources, quality of data, apparently contradictory studies, and validity of conclusions. The commenter also believes the PSS fails to provide for mitigation of value impacts such as a property value guarantee or buyouts.	<p>As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values.</p> <p>The comments made by the commenter will be considered as Exhibit 27 is developed.</p>
95	Vacco, D. (Town of Somerset)	95.E7.2	The Commenter provides a detailed recommendation of Study Methodology Stipulations to perform an impartial impact study. Commenter notes a focus should also include recognition of unique aspects of the lakefront residential markets, as impacts may trend differently than in locations with lesser amenity factors and related premium values of lakefront property. The commenter notes key elements of a Property Value Impact Study in order for the study to be credible and reliable (transparency, qualified valuation professionals, compliance with Uniform Standards of Professional Appraisal Practice (USPAP), sale data sources, appropriate definition of "Value", and use of recognized valuation methodology).	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not propose to complete a separate Property Value Impact Study, however the comments made by the commenter will be considered as Exhibit 27 is developed.
95	Vacco, D. (Town of Somerset)	95.E7.3	The commenter recommends detailed and specific progression and protocol of a study for the Lighthouse Wind Project. The commenter recommends "Phase I" is to identify the Project specific information, such as location and turbine specifications, environmental features, land use and specific residential, commercial, industrial and utility locations, photo simulations from neighboring residences, operational characteristics, fire protection measures and hazards from blade and ice throw. The commenter suggests the detailed information be presented to the appraiser and others to make meaningful comparisons.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not propose to complete a separate Property Value Impact Study, however the comments made by the commenter will be considered as Exhibit 27 is developed.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E7.4	The commenter recommends detailed and specific progression and protocol of a study for the Lighthouse Wind Project. The commenter recommends "Phase II" is to research of study locations, in order to collect data on home sales within view proximity to turbines of at least 3 miles (Target Area), as well as a similar size database of sales located at least 10 miles from any turbines(Control Area). Commenter suggests this can be understood as the basis for near vs. far value comparison, and "before and after" valuation analysis. The commenter also includes a list of particular research tasks, such as locating and researching other wind energy projects in NY, research economic drivers, local contacts, collect sales data and public records, research complaints, research comparable areas, etc. The commenter also suggests the study is repeated for other proposed facilities, such as transmission lines.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not propose to complete a separate Property Value Impact Study, however the comments made by the commenter will be considered as Exhibit 27 is developed.
95	Vacco, D. (Town of Somerset)	95.E7.5	The commenter recommends detailed and specific progression and protocol of a study for the Lighthouse Wind Project. The commenter recommends "Phase III" to determine what differences, if any, are indicated by comparison of Target and Control area databases, and should progress from a macro to a micro analysis. The commenter believes the macro analysis will reveal any overall market statistics on a prima facie basis and the micro analysis will utilize sub-sets of paired sale and resale data to compare "like kind" properties in the Control area with Target area sales, and after adjusting for any other differences between each paired data set, indicate any difference in value that can be attributed to turbine (or HVTL) proximity. The commenter also includes a list of particular analysis tasks, such as but not inclusive of analyzing data such as days on market, sale prices, structure characteristics, location from an existing turbine and number of visible turbines, and comparing resales.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not propose to complete a separate Property Value Impact Study, however the comments made by the commenter will be considered as Exhibit 27 is developed.
95	Vacco, D. (Town of Somerset)	95.E7.6	The commenter recommends detailed and specific progression and protocol of a study for the Lighthouse Wind Project. The commenter also recommends a parallel market study be performed utilizing informal research interviews where possible, and both an inferred and fundamental market analysis in order to cross-check and verify whether both methods are supportive of a single conclusion. The inferred market study would include additional research and analysis tasks while researching the Target and Control locations. Interviews of brokers, builders and local officials should be attempted to determine any local feedback regarding market supply and demand factors, trends or conditions, as well as any perceived impact on supply and demand from any source (i.e., opening or closing of a major employment source; new transportation linkages; demographic shifts or population changes, etc.)  Further, since Lighthouse Wind is a subsidiary of Apex, McCann recommends that the developer be asked to provide detailed scaled maps and photographs of any new construction near any of their other wind energy projects, as well as any other details of timing, pricing and absorption of any of the new construction homes near their projects.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be conducted and included in Exhibit 27 of the Certificate Application. The requested parallel market study is outside of the scope of Article 10 regulations. Lighthouse Wind does not propose to complete a separate Property Value Impact Study or parallel market study.
95	Vacco, D. (Town of Somerset)	95.E7.7	The commenter recommends detailed and specific progression and protocol of a study for the Lighthouse Wind Project. The commenter recommends "Phase IV" include the preparation of the study report, including all facts, data, analysis, findings and conclusions, as well as the detailed methodology used and a description of any basis relied upon to form the opinions. The Report should include appropriate graphic representations of the data and analysis, as well as an addendum containing the "raw" information, such as MLS listing sheets, public record documents used, and any other sources of data or information relied upon to develop the study opinions. Under USPAP requirements, McCann recommends use the most descriptive and transparent reporting possible.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not propose to complete a separate Property Value Impact Study, however the comments made by the commenter will be considered as Exhibit 27 is developed.
95	Vacco, D. (Town of Somerset)	95.E7.8	The commenter recommends detailed and specific progression and protocol of a study for the Lighthouse Wind Project. The commenter recommends "Phase V" of a property value study would include support from the commenter or any other appraiser retained to undertake the study to response to questions and inquire regarding the professional opinions developed and basis thereof.	A complete literature search of property value studies conducted at existing/operating wind farms will be conducted and included in Exhibit 27 of the Certificate Application. Lighthouse Wind will respond to any material comments submitted during public comment period during the Application phase.
95	Vacco, D. (Town of Somerset)	95.E9.33	Commenter notes the Town has identified portions of the Project area (in the Comprehensive Plan) as areas for agri-tourism and asks how this Project will impact the Town's ability to generate agri-tourism in the area.	Impacts to tourism from the Project will be further analyzed and discussed within Exhibit 27 (Socioeconomic Impacts) of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.34	The commenter states the Town's Wind Energy committee has clearly identified the potential economic impacts of industrial grade turbines and these proposed concepts for a new law should be utilized in this PSS. These socioeconomic issues/ impacts include; tax impacts, costs to infrastructure, business impacts, tourism and agricultural impacts, home values, real estate impacts, etc. Mitigations to evaluate include property value guarantees and posting of a bond to cover property value losses.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values. The Certificate Application will also include a comprehensive review of all local laws in effect and applicable to the Project.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
96	Kremer, K. (Save Ontario Shores, Inc.)	96.11	Commenter states the issue of tourism was not addressed in the PSS, which is a key problem with the Lighthouse Wind Project. Commenter also remarks that this is an issue of population, as during the spring, summer and fall months the population of these towns swells with thousands of visitors coming for the day or staying over at the lake cottages. Commenter states New York State spends millions to attract people from all over the country to visit beautiful places, and the impact of 70 industrial turbines on this beautiful region that attracts so many must be carefully reviewed and studied.	The potential effects on tourism by the Project will be discussed in Exhibit 27 (Socioeconomic Effects) of the Certificate Application.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.12	Commenter states there are valid concerns about the value of the lake properties and the tax base. Industrial Wind Turbines that stand 600 feet into the skyline would be to the detriment of current users who value the view. Commenter states placement of these turbines so close to the shoreline would risk the loss of this valuable and growing asset and notes that shoreline properties differ significantly from other town residences. Commenter claims any real estate study that is not set on a tourist lakeshore is not fully applicable to this region. Commenter notes that owners pay a large percentage of the town taxes and they value the agricultural/rural and natural setting of the region. Commenter states that Lighthouse Wind has stated that there is no evidence of property devaluation and so the Application should discuss a fund that would be available for people who are negatively affected by property devaluation.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make, nor are they required to make under Article 10 regulations, any guarantee to property values.
97	Wasilewski, T.	97.7	Commenter states that Lighthouse Wind claims there is "limited residential development in the Project area;" are not true because there are extensive shoreline residential development and inland residences that be impacted by the visual problems highlighted above as well as infrasound and low frequency noise. And what will happen to future residential development? There probably won't be any based on studies now being completed. Market values of residences in sight of IWTs drop as much as 40 % per the studies done including the ones done by nationally known real estate appraisal company McCann and Associates. As people living near IWTs have told me they cannot sell their houses-they say who in their right mind would want to live near the noisy, unsightly, bird and bad killing, inefficient IWTs.	Lighthouse Wind acknowledges that there is some residential development within the Project site, however land use within the Project site is dominated by agricultural and rural activities. As such, Lighthouse Wind feels it is accurate to identify the area as limited residential development. Lighthouse Wind will provide an assessment of potential impacts to property values in the Certificate Application based on data from existing wind farms and literature review of existing property value studies.
102	Behnke, H. (DPS)	102.119	In discussion of the existing setting, characterization of Orleans County and local business and industrial conditions cites to data that is over 12 years old (2003). While historic data may be of some interest, Orleans County Planning and Economic Development Agency personnel should be contacted for more current information to describe recent conditions.	Lighthouse Wind will consider coordination with the Orleans County Planning and Economic Development Agency to update the existing setting/land use in the Certificate Application.
102	Behnke, H. (DPS)	102.120	Discussion of concern regarding potential property value depreciation (page 79) cites to studies that rely on sales data sets that range well beyond wind project affected areas to populate data pool to enable statistical analysis. Limitations of studies cited in the Application and studies' applicability to the Project Area characteristics should be reported in the application.	The requested information will be addressed in the Certificate Application. As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be evaluated and included in Exhibit 27 of the Certificate Application.
102	Behnke, H. (DPS)	102.122	Discussion (at PSS page 81) regarding the potential for project operation to not affect municipal budgets for additional municipal facilities or services should be amended to address potential Project effects on development patterns in relation to installed municipal infrastructure. Project facilities should be sited to avoid areas where planned community expansion is encouraged by Comprehensive Planning documents, zoning regulations, and municipal infrastructure (such as existing water and sewer mains) supports residential or business/industrial development. (See also discussion above in Land Use section.)	Lighthouse Wind will include in the Certificate Application, a statement as to whether or not municipalities have adopted comprehensive plans and whether the proposed land use for the Project is consistent with these plans. A map will also be included in Exhibit 4 of the Certificate Application which includes proposed or existing zoning districts and a description of the permitted and prohibited uses within each zone. Qualitative assessments on the compatibility of the Project with existing, potential, and proposed land uses within the Study Area will be made and incorporated in Exhibit 4.
110	Isselhard, A.	110.4	Commenter believes the Lighthouse Wind website is incorrect regarding property values. Commenter states Wyoming County, NY property values have dropped since wind turbines were constructed there, and may properties cannot be sold or are sold for much less than the assessed value. Commenter also notes similar situations in Naples, NY and Wolfe Island, Ontario near Cape Vincent, NY.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be conducted and included in Exhibit 27 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
111	Jarvis, C.	111.2	In regards to PSS Section 1.5, commenter questions how economic benefits will be significant, and asks what the long-term economic benefits will be. Commenter includes several reason why they believe benefits will not be significant: payments based on production to less than 30% of the residents, temporary construction employees who may or may currently reside locally, up to 13 maybe permanent employees, increased tax revenues that will not help the local communities, a PILOT that will maybe give each county, town and school district \$250,000 annually and will hamper state aid, support local business of which there are few, but like the Somerset Operating Plant will draw businesses from around the state to cash in and leave before the Project is over.	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. While New York's property tax cap counts PILOT payments the same as tax payments for purposes of calculating the allowable tax levy increase of a jurisdiction, entry into a PILOT agreement does not adversely impact any of the tax jurisdictions for levy increase purposes, because new PILOT revenue from the Project diminishes the portion of any levy increase that would come from other taxpayers. As stated earlier, whether the new revenue streams created by wind project PILOT agreements end up resulting in reduced tax rates is most influenced by tax jurisdiction decisions concerning their budgets and how to spend the new sources of revenue.</p> <p>Lighthouse Wind notes that the resulting tax benefits can enhance the desirability of a community. The benefits provided from wind farm projects in other communities in New York have enabled the enhancement of civic institutions, such as schools, churches and community organizations. For example, the PILOT payment will provide for direct payments to the local school districts on an annual basis. These types of benefits help sustain and grow local budgets assisting the local economic development of a community.</p> <p>Economic benefits of the Project will be outlined further in Exhibit 27 of the Certificate Application.</p>
112	Hoffman, J.	112.1	Commenter expresses concern over the 3200 jobs at NFARS that commenter states are in jeopardy. Commenter claims that it is likely the base will be reviewed in 2017 under Base Realignment and Closure Recommendations (BRAC) and the stigma of Lighthouse Wind in the area will weigh on the decision to place NFARS on the closure list. Commenter states that Lighthouse Wind project should be immediately halted.	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address this topic in a Socioeconomic Assessment and will be included as part of Exhibit 27 of the Certificate Application.</p> <p>With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. The events leading up to the Base Closure and Realignment Committee to decide to close a base are based on many complicated and varied factors, none of which involve proximity to a wind farm project. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore, there is no basis to consider the potential closure of the basis and the economic consequences as it does not relate to the development of the wind project.</p>
DMM4	Speis, R.	DMM4.2	Commenter notes that he recently purchased a lakefront cottage near Golden Hill State Park and although was considering investing more in the area, or starting/buying a small business, he has decided to indefinitely put his plans on hold, therefore already the Project has had an adverse effect on the area.	It is the commenter's decision to place their plans on hold and therefore, any adverse financial impact they may have experienced is of their own doing. Potential economic impacts from the Project will be explored in detail in Exhibit 27 (Socioeconomics) of the Certificate Application.
DMM7	LaPorte, A.	DMM7.1	Commenter disapproves of seeking waivers from non-lease-holding adjoining home owners for noise or setback requirements. She states this will take away the right to claim damages in the future and will decrease the value of the property. She questions when trying to sell the land, as the waiver remains with the land and has to be disclosed at the time of sale, why someone would purchase a home with known noise and health problems.	Lighthouse Wind acknowledges that not all landowners may be willing to negotiate setback waivers. Lighthouse Wind would only work and acquire such waivers with willing parties. In case of future property transactions, waivers would be required to be disclosed which would allow for a non-consenting buyer to analyze and determine whether or not any perceived impacts are acceptable. Lighthouse Wind cannot and will not force property owners to accept such agreements.
DMM8	Yeates, M. and C.	DMM8.2	Commenter expresses concerns over property value impacts. Commenter questions who will compensate for the probable decrease in value to the homes.	As stated in Section 2.12 of the PSS, a complete literature search of property value studies conducted at existing/operating wind farms will be conducted and included in Exhibit 27 of the Certificate Application. Lighthouse Wind does not make nor are they required to make under Article 10 regulations, any guarantee to property values.
DMM8	Yeates, M. and C.	DMM8.3	Commenter states understanding that the tax benefit to the Town of Yates and Lyndonville would be so small to be any true benefit.	Economic impacts of the Project will be discussed further within Exhibit 27 (Socioeconomic) of the Certificate Application.
DMM11	Carestia, T.	DMM11.1	Commenter discusses a conversation had with locals in Cohocton, NY where taxes increased in the third year after the turbines were installed, after 2 years of reduced taxes. The sentiment he heard was very negative, and expresses his opposition to the Project.	For your reference a description of potential impacts on socioeconomic aspects of the community will be included within Exhibit 27 of the Certificate Application.
DMM25	Gardner, J.	DMM25.2	In addition there are other considerations regarding the Projects location. Christian Lighthouse Camp, Haight campgrounds, Blackbird Ciderworks, and the YMCA Camp Keenan will all suffer with reduced business	These areas along with other public land uses, parks, campgrounds, etc. determined to be located within the Study Area will be analyzed and incorporated into Project facility siting and land use maps to be provided in Exhibit 4 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM27	Campbell, S.	DMM27.1	Commenter copies an article from the Batavia News, which discusses the surplus of income generated from the Noble Environmental Power wind turbines, a fund set up from the surplus income for tax relief in the future if the wind power project went away, and capital improvement projects funded by annual wind revenues. The commenter notes that these would be wonderful benefits in the Town of Yates.	Comment noted.
DMM28	Pitcher, M.	DMM28.4	Commenter also notes residents Shineldecker have unsuccessfully tried to sell their home for 3.5 years.	Lighthouse Wind would like to respectfully recognize that there are many factors involved in selling a home, not limited to location, condition, asking price, and demand. Lighthouse Wind would also like to point out that discussions in the area for the potential of a wind energy project began approximately two years ago and many other homes have sold within the same timeframe in the Towns of Somerset and Yates.
DMM41	Arlington, D.	DMM41.1	Commenter rents their cottage for about 9 months of the year and remarks they have excellent reviews for the area and its peaceful setting. Commenter supports more development for stores and restaurants in Yates, but doesn't see it happening. Commenter believes the Project will seriously impact the cottage business and local businesses, stating that the turbines will be very near homes and cottages. Commenter expresses that she does not want turbines in her area.	Socioeconomic impacts and effects on tourism will be outlined further in Exhibit 27 of the Certificate Application.
DMM44	LaPorte, A.	DMM44.1	Commenter notes that the potential project is already hurting the economy, putting off plans of remodeling or adding additional rooms to homes and new homes are not being built. Commenter states turbines do not belong within miles of towns.	Project siting will be further discussed within Exhibits 3 and 4 of the Certificate Application. Socioeconomic Impacts will be further analyzed and discussed within Exhibit 27 of the Certificate Application.
DMM66	Smith, A.	DMM66.2	Commenter is concerned about potential impacts to those employed at the air base.	As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address this topic in a Socioeconomic Assessment that will be included as part of Exhibit 27 of the Certificate Application.  With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. The events leading up to the Base Closure and Realignment Committee to decide to close a base are based on many complicated and varied factors, none of which involve proximity to a wind farm project. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore, there is no basis to consider the potential closure of the basis and the economic consequences as it does not relate to the development of the wind project.
DMM68	Titus, D.	DMM68.1	Commenter is opposed to the Project and believes that economic benefits will not outweigh costs to the community.	Socioeconomic effects of the Project will be further analyzed and outlined in Exhibit 27 of the Certificate Application.
DMM80	Doughty, K.	DMM80.1	Commenter concerned about the general impacts on the lake shores and community character.	Community character in the Project site will be discussed in Exhibit 4 of the Certificate Application. This Exhibit will also include an analysis of impacts of Project facility construction and operation on community character, and identification of avoidance or mitigation measures that would minimize adverse impacts to community character.
DMM81	Dudley, S.	DMM81.2	Commenter indicates they maintain a year-round home in the area and they hoped to retire there and live out the rest of their lives there; they have invested their money into their home. Commenter indicates they are fearful the area will be overrun with wind turbines causing a loss of property value and that they will also find the area unlivable (due in part to health impacts).	Lighthouse Wind will provide an assessment of potential impacts to property values in the Certificate Application based on a complete literature search of property value studies conducted at existing/operating wind farms. Additionally, Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the Certificate Application.
DMM81	Dudley, S.	DMM81.6	Commenter states there is a large population of Amish in the area whom don't use electricity in general and claims this Project would drive them out of town and might actually lead to an overall increase in carbon footprint.	Effects from the Project in regards to Community Character will be further discussed in Exhibit 4 of the Certificate Application.
DMM82	Londergan, M.	DMM82.4	Commenter notes Project will negatively affect tourism for those who come for bird watching, fishing, for peace and quiet, and phenomenal starry nights.	Potential effects on tourism from the construction or operation of the Project will be discussed within Exhibit 27 (Socioeconomic Impacts) of the Certificate Application.
DMM83	Doughty, P.	DMM83.1	Commenter concerned about Project tearing community apart. Giant wind turbines that close to residents is unthinkable. They promise to be noisy, ugly, and will destroy pastoral beauty of the incredible and rare farming community.	Potential effects from the Project in regards to community character will be further discussed in Exhibit 4 of the Certificate Application. Potential noise impacts will be discussed in Exhibit 19 of the Certificate Application. Potential visual impacts will be presented in Exhibit 24 of the Certificate Application.
DMM95	Dudley, S.	DMM95.2	Commenter indicates that this area of the state is trying to develop tourism as an industry but they have seen the Ontario Parkway crumble from disuse and lack of funding and a wind farm would further blight the area, driving tax-paying residents away and eroding the tax base in addition to seriously affecting the long term residential construction industry.	Potential socioeconomic effects of the Project will be further analyzed and outlined in Exhibit 27 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM101	Dudley, S.	DMM101.1	Commenter cites an article discussing the impacts of renewable energy on the Spanish economy: <a href="http://stopthesethings.com/2014/06/02/spains-renewable-energy-disaster-draws-to-a-close/">http://stopthesethings.com/2014/06/02/spains-renewable-energy-disaster-draws-to-a-close/</a> Commenter quotes article as staying Spain provides the perfect "model" for any Country looking to destroy itself in blind pursuit of "green" energy ideology and that trying to power a (notionally) first world economy with intermittent and unreliable wind and solar power is nothing more than an infantile delusion.  Commenter states that reliable, affordable energy is needed, as are programs to promote conservation of energy.	Comments notes. Potential socioeconomic effects of the Project will be further analyzed and outlined in the Certificate Application, Exhibit 27 and Exhibit 5 will include an assessment of electric system effects.
DMM106	Arlington, T.	DMM106.2	Commenter is concerned that tax revenue will not offset impacts to quality of life.	Potential socioeconomic effects of the Project will be further analyzed and outlined in Exhibit 27 of the Certificate Application. Potential Project impacts on community character will be further outlined in Exhibit 4 of the Certificate Application.
DMM116	Evans, K.	DMM116.1	Commenter believes people will move out of the area and tourists will no longer visit - PILOT and Host Community Agreements will not be significant enough to justify them.	Potential socioeconomic effects of the Project will be further analyzed and outlined in Exhibit 27 of the Certificate Application.
DMM126	Bansbach, J.	DMM126.1	Commenter is concerned the Project will have negative impacts to the rural/agricultural nature of the towns.	Community character in the Project site will be discussed in Exhibit 4 of the Certificate Application. Exhibit 4 will also include an analysis of potential impacts of Project construction and operation on community character, and identification of avoidance or mitigation measures that would minimize potential adverse impacts to community character.
DMM127	DeMerle, R.D.	DMM127.3	Commenter does not believe a "return of \$1.6 million per year to be divided up between the two counties, towns and schools involved and up to 13 new jobs" is a good deal.	Economic benefits of the Project will be outlined further in Exhibit 27 of the Certificate Application.
DMM129	Schwabel, Pe.	DMM129.1	Commenter is concerned about adverse impacts to community character from the Project (visual, noise, wildlife).	Community character in the Project site will be discussed in Exhibit 4 of the Certificate Application. Exhibit 4 will also include an analysis of impacts of facility construction and operation on community character, and identification of avoidance or mitigation measures that would minimize adverse impacts to community character.
DMM135	Smith, D. (SOS)	DMM135.1	Commenter is concerned about potential impacts to radar and flight operations and the potential that these impacts could cause the base to close.	As stated in the PSS, The Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The DOD has a systematic process for reviewing project information, which is defined in Part 211 of Title 32 of the Code of Federal Regulations ( <a href="http://www.ecfr.gov/cgi-bin/text-id?SID&amp;node=pt32.2.211&amp;rgn=div5">http://www.ecfr.gov/cgi-bin/text-id?SID&amp;node=pt32.2.211&amp;rgn=div5</a> ). Additionally, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
DMM136	Schwabel, Pa.	DMM136.4	Commenter is concerned about impacts to investments people have made in their homes and businesses.	Lighthouse Wind will provide an assessment of potential impacts to property values in the Certificate Application based on a complete literature search of property value studies conducted at existing/operating wind farms.
DMM136	Schwabel, Pa.	DMM136.5	Commenter is concerned about changes to community character and "industrialization" of the area.	Community character in the Project site will be discussed in Exhibit 4 of the Certificate Application. This will also include an analysis of impacts of Project construction and operation on community character, and identification of avoidance or mitigation measures that would minimize adverse impacts to community character.
DMM139	Bansbach, J.E.	DMM139.1	Commenter is opposed to subsidies for renewable energy and concerned about increased electricity costs from renewable energy.	Comment noted.
DMM141	Dudley, S.	DMM141.3	Commenter is concerned the Project could result in the loss of the Niagara Falls Air Reserve Station.	Lighthouse Wind recognizes the importance of the NFARS to the regional community and economy, and will evaluate other similar operating wind projects within military installations as part of the Socioeconomic Assessment to be included in Exhibit 27 and Effect on Transportation in Exhibit 25 of the Certificate Application. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The DOD has a systematic process for reviewing project information, which is defined in Part 211 of Title 32 of the Code of Federal Regulations ( <a href="http://www.ecfr.gov/cgi-bin/text-id?SID&amp;node=pt32.2.211&amp;rgn=div5">http://www.ecfr.gov/cgi-bin/text-id?SID&amp;node=pt32.2.211&amp;rgn=div5</a> ). Additionally, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
DMM141	Dudley, S.	DMM141.4	Commenter is generally concerned that wind power is unnecessary and too costly based on future projections.	The need for the Project is established in Section 1.5 of the PSS.
DMM142	Howard, S.	DMM142.3	In regards to the PSS Section 1.5, page 6, the commenter notes that turbines in Java, NY and other communities in the state are small turbines compared to size of the turbines proposed by Lighthouse Wind. The commenter requests that negative economic impacts of industrializing a rural area be seriously analyzed in detail, including the negative economic impacts from loss of property values and of tourists avoiding the industrialized shoreline.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Potential effects on tourism from the construction or operation of the Project will be discussed within Exhibit 27 (Socioeconomic Impacts) of the Certificate Application. Exhibit 27 will also include an assessment of property values based on data from existing wind farms and a comprehensive literature review.
<b>Environmental Justice (PSS Section 2.13/Application Exhibit 28)</b>				
19	Spliethoff, H. (NYSDOH)	19.10	Regarding PSS Page 81, Section 2.1.3, the commenter suggests it would be helpful if a map indicating the location of the PEJAs with respect to the study area is included in the application.	Lighthouse Wind has previously provided a map of the PEJAs in relation to the Project in the Project PIP.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.56	Regarding PSS Section 2.13, the commenter believes Lighthouse Winds fails to adequately address the impact of the closure of NFARS on Potential Environmental Justice Areas (PEJAs) located in Lockport, NY. If the Project's encroachment leads to the closure of NFARS, the commenter states there will likely be a huge impact on the environment of Niagara County as a whole. Commenter believes a full environmental justice analysis is required in accordance with 16 NYCRR 1001.28.	As discussed in other responses within this document, the FAA and DOD will be consulted regarding potential encroachment on the Niagara Falls Air Reserve Station and an assessment of the potential impacts in regards to Environmental Justice will be included in the Certificate Application. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
<b>Electric and Magnetic Fields (PSS Section 2.14/Application Exhibit 35)</b>				
95	Vacco, D. (Town of Somerset)	95.57	Regarding PSS Section 2.14, the Town reserves the right to comment further on this issue once the actual location of the Turbines is revealed.	Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout of the Project and will provide this information as soon as it is available. As identified in Lighthouse Wind's PIP, one of the goals of the pre-application timeframe is for Lighthouse Wind to solicit information and feedback from Stakeholders that it can use to assess the location of Project components as the project development continues to be refined, thereby minimizing potential impacts associated with the Project.
<b>Evaluation of Alternatives (PSS Section 2.15/Application Exhibit 9)</b>				
11	Simon, J. (Town of Yates Supervisor-Elect)	11.2	Commenter asks that Lighthouse Wind provide an explanation of sufficient wind resources with the Project area.	Sufficient is defined as at least a top 40% wind resource in the respective energy market. All wind resource data collected for this Project is proprietary and the release of this data is not required under the Article 10 regulations. There is a New York Wind Resource Map available on the U.S. Dept. of Energy's website at the following link: <a href="http://apps2.eere.energy.gov/wind/windexchange/images/windmaps/ny_80m.jpg">http://apps2.eere.energy.gov/wind/windexchange/images/windmaps/ny_80m.jpg</a>  According to generally available data and data acquired by meteorological towers in the Project site, there is a strong wind resource in the Project site, that is, at least a top 25% wind resource in the respective energy market.  Exhibit 8 of the Certificate Application will include information in regards to the electric system production modeling.
21	Spitzer, D. (Attorney for Town of Yates)	21.9	Commenter notes that since the PSS indicates Project may exceed the maximum wind energy conversion system ("WECS") tower height limits set by the Town (PSS at 100), an evaluation of alternatives should address tower height as part of the scale and magnitude section.	The Project turbines are likely to exceed the maximum overall height (450 feet) as set by the Town of Somerset. Lighthouse Wind may seek a determination from the Siting Board that the height restriction is unreasonably burdensome in view of the existing technology and thus that the restriction not be applied to Lighthouse Wind's Project. As a part of the evaluation of alternatives in the Certificate Application, it is anticipated that information regarding scale and magnitude will be inclusive of the height of turbines.
30	Bronson, C.	30.1	In regards to PSS Section 2.15.1, commenter asks what the difference is between "Strong Wind Resource Area" or "Sufficient Wind Resource". Commenter asks exactly what studies were used to determine this information.  Commenter notes that several met towers have been erected and met devices have been used in the area. Commenter would like to know:1. How many met devices were utilized in Yates and Somerset2. A description of all of these devices, including make/manufacturer3. An exact location in Yates and Somerset where these were placed (both tower and portable devices) A. Exactly in what land parcels they were placed, for the duration each was placed, and what data, raw and extrapolated—was yielded from those met devices, specifically in regards to wind data: speed, duration, direction, all tied to the calendar days, since seasonal changes would be anticipated and considered. B. Please forward your complete studies, along with a description of the length of the study or studies that would lead you to conclude that this area was "a strong wind resource area". C. What is defined in your terms as "Strong"? D. What is defined in your terms as "Sufficient"? Please quantify your terms.	This area has a Strong Wind Resource, that is, at least a top 25% wind resource in the respective energy market. Sufficient is defined as at least a top 40% wind resource in the respective energy market.  This was determined by using 2 meteorological towers and one remote sensing SODAR and the collected data for over a year. This data is input into the linear flow model called "OpenWind" to extrapolate annual wind speed across the site. To date, 3 total meteorological assets have been used. The devices used were 2 NRG 60m XHD meteorological towers with Riso Class One anemometers, 2 wind vanes, a thermometer, barometer, and a pyrometer and one SecondWind Triton Sodar Unit with propane burning functionality.  The devices were located at NY_Nellist4180: 43.36008, -78.48711; NY_Bane9763: 43.36658, -78.42192; NY_Nellist562-263: 43.36043, -78.48782 (Sodar). The parcels the 3 meteorological assets are placed on: two units on Larry Nellist's (Met Tower and Sodar) and one on Donna Bane's property (Met Tower). NY_Nellist4180 was installed in December 2014, NY_Bane9763 was installed July 2015; NY_Nellist562-263 was installed September 2015.  The data is taken from all respective meteorological assets and extrapolated across the site horizontally using modeling. They are also extrapolated vertically using the power and log law equations of wind shear. The Sodar unit provides data up to 650 feet, which covers the entirety of any potential wind turbine rotor and is helpful in reducing power production uncertainty.  As mentioned previously, all wind resource data collected for this Project is proprietary. The release of this data is not required under the Article 10 regulations. There is a New York Wind Resource Map available on the U.S. Dept. of Energy's website at the following link: <a href="http://apps2.eere.energy.gov/wind/windexchange/images/windmaps/ny_80m.jpg">http://apps2.eere.energy.gov/wind/windexchange/images/windmaps/ny_80m.jpg</a>  Exhibit 8 of the Certificate Application will include information in regards to the electric system production modeling.

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
30	Bronson, C.	30.2	<p>In regards to PSS Section 2.15.1, Commenter requests a definition of “adequate” in terms of access to the site. Commenter also asks how many access roads would be necessary to build by Lighthouse Wind to “adequately” access turbines. Commenter questions how adequate access can be determined if how many, what kind, or exactly where Turbines will be located is currently unknown. Commenter questions if Lighthouse Wind means access on a micro-scale, as in getting to the fields without obstructions. Commenter also asks how many roads through agricultural areas will you build, and if these access roads will be remediated at the conclusion of the turbine construction, and how remediation will be accomplished.</p> <p>Commenter asks how the site will be accessed in terms of delivering turbines. Stating that access from the New York Thruway (I-90) requires transport over Erie Canal bridges which were not constructed for wide loads, or heavy loads. Commenter asks what the plans are to deliver the huge weights and wide loads, and if Lighthouse Wind anticipates using water ports to access the sites. Commenter questions what existing roads will be reconfigured, widened, or otherwise altered in the construction of the turbines, and asks for a list of these roads and explanation of intentions for doing so. Lastly, commenter asks what other sites have been examined that have been determined to be “inadequate” in terms of access and asks to list and explain the inadequacies.</p>	<p>It is Lighthouse Wind's intention to address all of these concerns within the Application phase of the Article 10 process. Specifically, Exhibit 25 (Effects on Transportation) will address the access road locations and widths, and access road construction details as well as whether or not these roads are proposed to be temporary or permanent in nature. Access and transportation routes will also be addressed within this same Exhibit. If any existing roads are anticipated to be reconfigured, widened, or otherwise altered these roads will be identified within the Certificate Application and reasoning will be provided.</p>
30	Bronson, C.	30.3	<p>In regards to PSS Section 2.15.1, Commenter asks for an explanation for why the Somerset coal plant is the best electrical system in terms of connection to a grid, and what other electrical systems have been evaluated in Western NY and in New York State. Commenter requests the data that was used to determine that the Somerset location is best suited and the plan for underground and above-ground transmission lines with regard to specific land parcels, including those parcels that are as yet unavailable to Lighthouse Wind.</p>	<p>Information in regard to these comments will be included in the Certificate Application. Exhibit 5, Electric System Effects as well as Exhibit 9, Alternatives will discuss most of this information. Exhibit 3, Location of Facilities will include the layout of the Project components including the parcels on which they are proposed.</p>
30	Bronson, C.	30.4	<p>In regards to PSS Section 2.15.1, Commenter request Lighthouse Wind elaborate on the specific town/village codes for each of Somerset and Yates that allows for:</p> <ol style="list-style-type: none"> <li>1. the presence of 60-70 towers over 200 feet, or even extending to 600 feet high</li> <li>2. noise – specific decibel levels—for both daytime and nighttime, and the type of noise not associated with natural sounds (mechanical sounds should not be equated with waves, wind, wildlife)</li> <li>3. flickering and annoying lights, both steady and strobe</li> <li>4. a co-existence of agriculture and homes within a wind project as huge as the one Lighthouse Wind proposes.</li> </ol> <p>Commenter requests Lighthouse Wind write verbatim the municipal code which Lighthouse Wind feels allows or invites any industrial wind turbines within its borders.</p>	<p>The Certificate Application will address each applicable local law and ordinance and whether the Project would comply or provide reasoning for why a waiver is being sought.</p>
30	Bronson, C.	30.5	<p>Regarding PSS Section 2.15.1, commenter requests a list of all parcels, with landowners’ names, acreage, and exactly what will be placed on each parcel, and why that parcel is necessary for the Project and show all parcels that must still be necessary, but not leased to date, which need to be part of the Project in order to show a contiguity necessary to proceed with the Project.</p>	<p>Lighthouse Wind will provide in the Certificate Application, tax parcel maps which identify owners of record of all parcels included within the Project Site and all adjacent properties (such information may be depicted on the maps and/or included on an associated table). The Certificate Application will provide a description of titles or leases for parcels that are secured or under option for the Project, including ingress/egress access to public roads, and will provide a statement that Lighthouse Wind has or can obtain access to parcels needed for title or lease interest in the Project. Please also note that Lighthouse Wind has been working with all public and private landowners to obtain leasing or easement rights for the Project and will continue to work towards securing all land necessary to construct and operate the Project. The Article 10 Application will provide a statement that Lighthouse Wind has or can obtain access to parcels needed for the Project interconnects.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind’s Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
30	Bronson, C.	30.6	Regarding PSS Section 2.15.1, Commenter states that if Lighthouse Wind were interested in avoidance, then there would be no project. Commenter believes there will be no avoidance of impacting our environment and claims this section is insulting and disingenuous to residents here. Commenter asks exactly what environmental impact could Lighthouse Wind avoid, asking to list all environmental impacts and how each would be avoided, and all environment impacts and how they would be minimized. Commenter asks for each impact, define (quantify) “minimizing the impact” and cite the studies used so far for each environmental impact of Lighthouse Wind. Commenter also requests for each impact, show how the study is tailored to the specific environmental conditions that exist in Somerset and Yates with unique shoreline, wildlife, geology, watershed, plant life, agriculture (both crops, fruit growing, and livestock), weather, riparian resources, temperatures (again, fruit growing environmental conditions). Commenter also asks how it is determined a “significant” environmental impact vs. minimal or insignificant and asks for a study that indicates a quantifiable distinction in employing these terms.	<p>One of the main intents of the PSS is to outline a scope of studies and required pre-construction and post-construction monitoring to identify potentially significant adverse environmental impacts resulting from the construction and operation of the proposed Project including an identification of particular aspects of the environmental setting that may be affected, any material impacts or effects identified in consultations by the public, affected agencies, and other stakeholders, and a responsive analysis by Lighthouse Wind as to those issues identified in consultation.</p> <p>Exhibit 22 of the Certificate Application will include an identification and evaluation of reasonable avoidance measures (or where impacts are unavoidable) mitigation measures including the use of alternative technologies, regarding wildlife and wildlife habitats and vegetation. Plans to avoid or where unavoidable, minimize and mitigate, such impacts during construction and operation of the facilities will also be developed and incorporated into the Certificate Application.</p> <p>Lighthouse Wind acknowledges that "significant" is a subjective term used to identify noteworthy articles or resources of importance. The term is utilized within the Article 10 Regulations without a specific definition attached. Suffice it to say that Lighthouse Wind will provide information on any material impacts identified by the public, affected agencies, and stakeholders as well as provide information at a sufficient level to address the specific regulations of Article 10.</p>
30	Bronson, C.	0.7	<p>Regarding PSS Section 2.15.1, commenter provides the following questions regarding residential development in the area: What is the population density of the Project area? How many people reside in the Project area? How many homes are in the Project area? Why is “limited residential development” desirable?</p> <p>Commenter also believes health effects to humans is an important issue and believes humans are in jeopardy due to proximity to wind projects. Commenter asks what health studies are planned to determine that wind farms pose no health threat to humans who live in the confines of these wind projects? Commenter asks for a list all the studies, duration of study, baseline studies, and specific tests, conclusions of these studies as stated by those conducting the study, and no out-of-context conclusions.</p> <p>Commenter also requests the effects to residences within the wind project, including: cracks in walls, foundations, wells, and pipes leading to/from home; in regards to windows, blinds, shades, landscaping that all may ameliorate effects of shadow-flicker; and Infrasound reduction.</p>	<p>The purpose of the PSS is to establish the methodology, scope of studies, or program of studies to be conducted in support of a Certificate Application being submitted for the Project pursuant to Article 10.</p> <p>Lighthouse Wind will be conducting the required Noise and Vibration reports. This will include the measurement of ambient sound levels in the Project site. A Noise Impact Analysis (NIA) will be prepared consistent with Exhibit 19, Section 205-43.2 of the Town of Somerset Municipal Code, Section 591.13 of the Town of Yates Zoning Regulations, and the NYSDEC’s Assessing and Mitigating Noise Impacts (DEP-001-1) (NYSDEC, 2001). The NIA will use computer noise modeling values that match the characteristics of the “worst case” turbine model proposed for the Project. In addition, Section 2.3 of the PSS describes a number of studies and measures to be undertaken with respect to construction, operations (Ice Shedding, Blade Throw/Tower Collapse, Stray Voltage, Fire, Lightning Strikes, and Gaseous/Liquid and Solid Wastes). Section 2.9 commits to conducting a Shadow Flicker analysis and Section 2.14 provides details on EMF exposure. In addition to the numerous studies already committed to in the PSS, Lighthouse Wind is committed to having a comprehensive section on international research in wind turbines and health effects included in the final Certificate Application pursuant to Article 10. This will include the requested information on infrasound.</p>
30	Bronson, C.	30.8	Commenter believes it is unacceptable that this PSS does not deal with “reasonable and available alternative location sites” for the proposed Project. Commenter believes a dismissive statement that indicates that such will be provided in the Certificate of Application is insulting and disingenuous and if Lighthouse Wind does not possess sufficient acreage to do this Project at this time, then the Project should be abandoned at this time, since residents have no clear idea of the direction or expanse of this Project for immediate study.	<p>The purpose of the PSS is to establish the methodology, scope of studies, or program of studies to be conducted in support of a Certificate Application being submitted for the Project pursuant to Article 10. The Certificate Application will include the specific details regarding alternative location sites assessed in the scope or program of studies. Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout and will provide this information as soon as it is available. The PSS included figures indicating the Study Area being reviewed in support of the Certificate Application, which includes the areas being sought for easement and/or lease agreements.</p>
30	Bronson, C.	30.9	<p>Regarding PSS Section 2.15.2, commenter asks what are the “key resource studies” that relate to “environmental impacts” referenced in this section?</p> <ul style="list-style-type: none"> <li>•Name, subject, duration, conclusions drawn by original studies—not taken out of context or extracted without original data</li> <li>•Itemize each environmental impact and its associated key resource study</li> <li>•Discuss how each environmental impact would impact turbine placement alternatives</li> <li>•Discuss what criteria might constitute a “No action/No build” alternative. How much environmental damage would halt the construction of Lighthouse Wind? What kind of environmental damage and to what extent is it deemed acceptable, and by what parties?</li> </ul>	<p>Key resource studies and environmental impacts referenced in Section 2.15.2 of the PSS include those studies outlined in the PSS to be completed and incorporated into the Certificate Application, such as (but not necessarily inclusive of) avian and bat studies, wetland delineations, noise studies, cultural resource studies, preliminary geotechnical studies, and visual impact studies. Alternative Project layouts are reviewed to identify the potential impacts associated with each in order to minimize or avoid negative impacts to the extent practicable. A no action/no build alternative is an alternative where the Project is not built and includes an assessment of the potential positive and negative impacts if the Project was not to be constructed as proposed.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
30	Bronson, C.	30.10	<p>Regarding PSS Section 2.15.3, Commenter requests an explanation of the statement, "In the event that market conditions prevent the selection of a specific turbine model". Commenter asks what specifically is meant by "market conditions", and questions if that means that the turbine would be too costly or a turbine is no longer being manufactured. Commenter also asks what is the "largest turbine model" that would be considered.</p> <p>Commenter also questions how residents of this community can truly judge this Project when Lighthouse Wind statements say nothing about the size of the turbines or how large they will be. Commenter believes this is the most important information, and yet Lighthouse Wind choose to avoid this completely until the next phase of the Project, when residents will be less able to make decisions about it, or to access studies, or to conduct them.</p>	Lighthouse Wind has made no efforts to hide its intentions. The market may preclude (prevent selection of) certain models based on availability, price, lack of adaptability, etc. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the turbine models under consideration, including the largest one, if one has not been selected at the time a Certificate Application is submitted. Comment periods will once again be available following submission of the Certificate Application.
32	Kohlman, R.	32.4	In regards to PSS Section 2.15, commenter states the section discusses "relatively limited residential development" with no discussion of how many residents are impacted, quantification of the impacts, and compensation for those impacts. Commenter also asks what an acceptable amount of residential development is to disrupt and impact.	The Certificate Application will include a more detailed analysis of Project Alternatives and further quantification of impacts in regards to residential development within the proposed alternative locations. Statements will be provided as to the reasons why the proposed facility (including layout) are best suited among the alternatives to promote public health and welfare.
32	Kohlman, R.	32.5	<p>Regarding PSS Section 2.15.4, commenter believes no true evaluation of project alternatives proposed here and that Lighthouse Wind states such evaluations "are not the area of expertise of the Applicant".</p> <p>A project of this magnitude, local impact, and financial commitment from the government should require a true 3rd party engineering/economic/feasibility analysis of options, including impact assessment on the environment and community. Example alternatives include:</p> <ul style="list-style-type: none"> <li>• Biomass –the area has a very large cow population to support such a project</li> <li>• Solar is getting cheaper</li> <li>• A cogeneration natural gas generating plant combined with Biomass should be evaluated.</li> <li>• Potential businesses that could utilize waste heat from a cogeneration plant should be evaluated. Bringing them in would create more jobs and improve the overall cogeneration efficiency of say a biomass/generator facility.</li> </ul>	The Certificate Application will include identification and description of reasonable energy supply source alternatives including but not limited to alternatives to the proposed facility consisting of renewable generation, distributed generation, transmission, and demand-reducing alternatives, except alternatives may be limited to those that are feasible considering the objectives and capabilities of Lighthouse Wind or its affiliates. Evaluations will be made regarding comparative advantages and disadvantages of the proposed Project including engineering feasibility, reliability and electric system effects, environmental impacts, economic considerations, environmental justice considerations, security, public safety, emergency planning, public health, and the objectives and capabilities of Lighthouse Wind. This information will be provided in Exhibit 9 (Alternatives) of the Certificate Application.
47	Salmons, S.	47.3	Commenter requests Lighthouse Wind consider that the Niagara Falls Power Project already in place can create low-cost electricity. Commenter asks if Niagara Falls Power is running at full capacity and questions if there is a legitimate need to spend tax dollars on a project that studies show may create only a small percentage of electricity.	In addition to the responses throughout this document, information in regards to this comment will be included in Exhibit 8 (Electric System Production Modeling) and Exhibit 9 (Alternatives) of the Certificate Application.
89	Woodrich, G.	89.3	Commenter states increasing Niagara Hydro Power output 2.1% would generate the 50MWat less than 2cents/KWH. Commenter notes Niagara Hydro Power is clean, cheap, and extremely reliable with an existing water storage reservoir to meet peak hour demands.	Comment noted.
95	Vacco, D. (Town of Somerset)	95.58	In regards to PSS Section 2.15, the commenter states to the extent this section of the PSS calls for a cost benefit analysis of the Project and alternatives, the Town does not believe Lighthouse Wind will provide an unbiased analysis of alternatives including the no action alternative. Commenter states Lighthouse Wind, with stakeholder participation in the selection process, should engage an unbiased third party to evaluate the Project and its alternatives.	Information in regards to this comment will be included in Exhibit 9 (Alternatives) of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.59	In regards to PSS Section 2.15, the Commenter states, pursuant to 16 NYCRR § 1000.5(1)(2)(x), Lighthouse Wind must reveal all land leased or owned by Lighthouse Wind and any of its affiliates, including but not limited to Apex Clean Energy and its affiliates. A comparison of siting between the Project location and all other land available to Lighthouse Wind or its affiliates must be conducted. It is the Town's position that all land held by Lighthouse Wind's affiliates must be included in the evaluation of alternatives section. This would include all land owned or leased by the sole owner of Lighthouse Wind, Apex Clean Energy, and all of its affiliates.	As stated in the PSS, Lighthouse Wind currently has no land holdings and therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components. Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout and will provide this information as soon as it is available. There is no requirement within the Article 10 regulations to reveal affiliate land holdings; the only requirement is to reveal affiliate relationships, which Lighthouse Wind reveals within the PSS.

Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.60	<p>In regards to PSS Section 2.15, page 84, Commenter believes none of the factors provided by Lighthouse Wind indicating a high level of economic viability counsel in favor of the Project. The commenter states:</p> <p>(1) Lighthouse Wind has not shown that the proposed Project site has adequate wind resources;</p> <p>(2) the Laws of Yates and Somerset are not compatible with the Project (further comment below);</p> <p>(3) Lighthouse Wind refuses to reveal the amount of land under lease, and therefore has not shown it has contiguous parcels large enough for the Project;</p> <p>(4) as demonstrated at length above, the Project will result in an environmental disaster for avian and bat species;</p> <p>(5) contrary to Lighthouse Wind's assertion, the turbines will be sited in the midst of a highly populated lakeshore region; and</p> <p>(6) farm, park, and residential land, and particularly waterfront resources, are categorically not compatible with industrial wind facilities. Commenter states these must be adequately addressed in the PSS.</p>	<p>The Certificate Application will elaborate further on the identified factors which indicate economic viability for the Project.</p> <p>(1) All wind resource data collected for this Project is proprietary and the release of this data is not required under the Article 10 regulations. According to generally available data and data acquired by meteorological towers in the Project site, there is a strong wind resource in the Project site. There is a New York Wind Resource Map available on the U.S. Dept. of Energy's website at the following link:  <a href="http://apps2.eere.energy.gov/wind/windexchange/images/windmaps/ny_80m.jpg">http://apps2.eere.energy.gov/wind/windexchange/images/windmaps/ny_80m.jpg</a></p> <p>(2) Local laws and ordinances will be discussed at length within Exhibit 31 of the Certificate Application.</p> <p>(3) Lands under lease will be identified and provided within the Certificate Application.</p> <p>(4) Effects and avoidance/mitigation measures for bird and bat species will be discussed within Exhibit 22 of the Certificate Application.</p> <p>(5) Turbines will not be sited in highly populated areas. This point will be evident with Project layouts and additional information provided in Exhibit 3 of the Certificate Application.</p> <p>(6) A qualitative assessment of the compatibility of the Project and any interconnection with existing, proposed and allowed land uses will be conducted and included in Exhibit 4 (Land Use) of the Certificate Application.</p>
95	Vacco, D. (Town of Somerset)	95.E9.1	<p>The commenter states the scoping document should not only define the potential impacts but in the analysis identify how the constraints and consequences of the narrowing of future options are undertaken (how the impacts of different alternatives will be evaluated once greater specifics are identified). In this respect, the commenter feels the scoping document lacks information on how this will be accomplished and therefore is inadequate.</p>	<p>Any detailed alternatives analysis will be limited to sites owned by, leased, or under option to Lighthouse Wind. General site selection process and Project details will be provided in the Application in the section on Alternatives (Exhibit 9). These will include a discussion of the comparative advantages and disadvantages of the proposed and alternative locations including engineering feasibility, reliability and electric system effects, environmental impacts, economic considerations, environmental justice considerations, security, public safety, emergency planning, public health, and the objectives and capabilities of Lighthouse Wind.</p> <p>Lighthouse Wind's private landowner agreements strictly limit the use of land to a wind power project, and as such, do not allow for the siting of other alternative energy production facilities (e.g., solar, hydro, biomass, or fossil fuel). Accordingly, other power generation technologies are not reasonable alternatives, and do not warrant consideration in the Article 10 Application. Rather, this section of the Application will provide details on the Project's design and technology including:</p> <p>1) The general arrangement and design.</p> <p>2) Wind turbine technology and alternate turbine models.</p> <p>3) Alternate scale and magnitude of the Project in the context of the interconnection position (i.e., maximum generating capacity of 201 MW) and information on the economic benefits to local communities related to scale and magnitude of the Project.</p> <p>4) A discussion of the final, maximum number of turbines that could be constructed based on siting factors (including setbacks) and identification of the position of all potential turbine locations, as well as an alternate layout in the Project area. The discussion will include examples of the number of turbines to be constructed depending on the turbine model selected. This section of the Application will also address why turbines of certain heights and dimensions are best suited for this Project, including an analysis of compliance with existing local height restrictions and turbines that would exceed local height restrictions. Additionally, this section of the Application will address the environmental impacts of the following alternative layouts:</p> <p>i) The use of taller turbines in the same locations as the proposed layout and the associated increased setbacks from residences, property lines, and public roads such that turbine fall-down distances are wholly within the participating land parcel</p> <p>ii) Alternative layout within the Project area</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E9.39	Commenter notes the PSS states " ... the Certificate Application will provide a statement to explain why the preferred alternative is best suited to promote public health and welfare." Commenter would like to know why this is not being performed in the Environmental Impact Analysis. Commenter would like to know, is it not a requirement of environmental analysis (EIS's) in NYS to complete an alternatives analysis?	The Siting Board, before it issues an Article 10 certificate, must make certain findings as required by the New York Public Service Law § 168. Among these findings is a determination that "the construction and operation of the facility will serve the public interest." In order to make this determination, the Siting Board, through its Article 10 Application requirements, requests that an Applicant explain how the proposed Project meets these findings. The PSS statement cited by Commenter was a commitment by the Company to provide "a statement that the preferred alternative ultimately selected by the Applicant is the best suited to promote public health and welfare," as required by the regulations for the Application Exhibit 9 discussion on Alternatives (16 NYCRR § 1001.9(d)). An Article 10 Application includes the types of information typically provided in an Environmental Impact Statement (EIS) under the State Environmental Quality Review Act (SEQRA), but under the Siting Board's procedures for environmental review; the Application takes the place of an EIS in the Article 10 context, since SEQRA itself does not apply. As stated in the PSS, Lighthouse Wind intends to provide the above information, as well as an Alternatives analysis and the other applicable information required by the Siting Board's regulations, in its Certificate Application, which will be filed at a later date.
95	Vacco, D. (Town of Somerset)	95.E9.40	Commenter would like the PSS and the environmental analysis to include a methodology to evaluate the alternative site selection process for each wind turbine location. The commenter believes this is extremely important for the siting of these structures.	Lighthouse Wind will base site selection for each wind turbine based on wind resources, location of sensitive environmental features (such as but not inclusive of wetlands, streams, cultural resources, geotechnical data, visual and noise sensitive resources), manufacturer and local law setback requirements, landowner agreement, and any other factors which may be deemed significant during design. Lighthouse Wind will site the Project to minimize impacts to resources reviewed in the environmental assessment for the Certificate Application the maximum extent practicable.
97	Wasilewski, T.	97.8	Commenter states that, in New York State, industrial wind turbines are operating at less than 25 % of capacity on average (U.S. Department of Energy) but Lighthouse Wind claims the Project will power 50,000 homes. Commenter states that Lighthouse Wind shows no support for that number, but if true those homes 'may' only receive wind produce electricity 25 % of the time and mostly at night when it is not needed as much. Commenter states a gas fueled electric power facility will have 80 % or more efficiency and have good paying permanent jobs, reliable dependable electricity, have a longer life as opposed to the 10-15 years of a wind facility.	The Certificate Application will include information to address this comment in Exhibit 8, Electric System Production Modeling. Lighthouse Wind will have up to 13 full time permanent jobs, and is expected to be operational for 20 to 30 years.
102	Behnke, H. (DPS)	102.123	Discussion of alternative Project Layouts (PSS subsection 2.15.2) states that: "Alternative Project layouts are currently being evaluated by the Applicant and will continue to be refined throughout the Article 10 process with input from Project stakeholders" (pg. 84). Stakeholder input would be enhanced by providing a preliminary layout for stakeholder review and consideration as a preliminary design, similar to a sketch plan review step of a local zoning or land use proposal. The company's response to PSS comments should include a preliminary Project Layout, potential alternative arrangements, or an explanation of when the layout will be provided.	The Certificate Application will include identification and description of reasonable energy supply source alternatives including but not limited to alternatives to the proposed facility consisting of renewable generation, distributed generation, transmission, and demand-reducing alternatives, except alternatives may be limited to those that are feasible considering the objectives and capabilities of Lighthouse Wind or its affiliates. Evaluations will be made regarding comparative advantages and disadvantages of the proposed Project including engineering feasibility, reliability and electric system effects, environmental impacts, economic considerations, environmental justice considerations, security, public safety, emergency planning, public health, and the objectives and capabilities of Lighthouse Wind. This information will be provided in Exhibit 9 of the Certificate Application.  If the modifications to the Somerset coal-fired power plant are determined to be reasonable and or within the purview of Lighthouse Wind, an evaluation will be made regarding comparative advantages and disadvantages of that proposed facility to those of the proposed Project within the Application.
102	Behnke, H. (DPS)	102.124	Concerned members of the Project Area community have expressed interest in seeing the Somerset coal-fired power plant be converted to a natural gas-fired facility as an alternative to hosting a wind-energy project. The discussion at subsection 2.15.4 (pages 84 - 85) indicates that Lighthouse Wind would reject consideration of such an alternative, in part, because "fossil fuel generation would pose more significant adverse environmental impacts, particularly on air quality but also on land use and water resources." DPS Staff requests that the application include a comparative analysis of the proposed wind energy project with a modified (gas-powered) Somerset Generating Plant in terms of adverse environmental impacts, including air quality, land use and water resources, visual and cultural resources.	The Certificate Application will include identification and description of reasonable energy supply source alternatives including but not limited to alternatives to the proposed facility consisting of renewable generation, distributed generation, transmission, and demand-reducing alternatives, except alternatives may be limited to those that are feasible considering the objectives and capabilities of Lighthouse Wind or its affiliates. Evaluations will be made regarding comparative advantages and disadvantages of the proposed Project including engineering feasibility, reliability and electric system effects, environmental impacts, economic considerations, environmental justice considerations, security, public safety, emergency planning, public health, and the objectives and capabilities of Lighthouse Wind. This information will be provided in Exhibit 9 of the Certificate Application.  If the modifications to the Somerset coal-fired power plant are determined to be reasonable and or within the purview of Lighthouse Wind, an evaluation will be made regarding comparative advantages and disadvantages of that proposed facility to those of the proposed Project within the Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
110	Isselhard, A.	110.14	Commenter believes more information on alternatives should have been provided in the PSS. Commenter states that a reasonable alternative would be to transform Somerset's 675MW coal powered Kintigh Generating Station into a natural gas powered plant. Commenter states that the power generation differential should be considered (675MW to 201MW), including that the wind factory will operate only 25%.	<p>The Certificate Application will include identification and description of reasonable energy supply source alternatives including but not limited to alternatives to the proposed facility consisting of renewable generation, distributed generation, transmission, and demand-reducing alternatives, except alternatives may be limited to those that are feasible considering the objectives and capabilities of Lighthouse Wind or its affiliates. Evaluations will be made regarding comparative advantages and disadvantages of the proposed Project including engineering feasibility, reliability and electric system effects, environmental impacts, economic considerations, environmental justice considerations, security, public safety, emergency planning, public health, and the objectives and capabilities of Lighthouse Wind. This information will be provided in Exhibit 9 of the Certificate Application.</p> <p>If the modifications to the Somerset coal-fired power plant are determined to be reasonable and or within the purview of Lighthouse Wind, an evaluation will be made regarding comparative advantages and disadvantages of that proposed facility to those of the proposed Project within the Application.</p>
DMM127	DeMerle, R.D.	DMM127.1	Commenter would like Lighthouse Wind to investigate any new technologies in wind power as alternatives to 600 foot tall turbines.	An alternatives analysis will be included in the Certificate Application at Exhibit 9 (Alternatives).
<b>Consistency with the NYS Coastal Management Program and Local Waterfront Revitalization Program Areas (PSS Section 2.16)</b>				
12	Smiley, A.	12.6	Commenter believes the Project will have a negative effect on CZMA and the waterways and revitalization areas.	Section 2.16 of the PSS includes a preliminary assessment of the NYS Coastal Management Program and Local Waterfront Revitalization Program areas within the vicinity of the Project. At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.
21	Spitzer, D. (Attorney for Town of Yates)	21.10	The commenter notes that the PSS states that the Project is anticipated to be consistent with the LWRP goals as summarized for the Town of Somerset, but it does not make a similar statement with respect to the goals of the LWRP for the Town of Yates. The Town requests that Lighthouse Wind make a similar commitment with respect to the Town's LWRP.	At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. Lighthouse Wind will review the Joint Kendall, Yates, Carlton LWRP, and will provide a discussion regarding consistency if project components are located within the LWRP [or LWDP].
29	Maid, G.	29.1	In regards to PSS Section 2.16.1.1 on pages 86 & 87, List number 1, the Commenter states this is a farm community, with substantial historic character and beauty and there is little to no "industry" in these communities. Certainly, nothing of this magnitude. Commenter claims the installation of 70 – 600+ foot industrial wind turbines, transfer stations, support buildings, and construction facilities in a few square miles is not "generally preserve community character and open space" and asks what studies were done or will be done, in these Towns, to prove this claim?	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>As stated in the PSS, the Project is anticipated to enhance existing land uses by increasing productive value of land per acre, and Lighthouse Wind anticipates the Project will coexist with ongoing agricultural uses, which can aid landowners in making these lands more financially sustainable. Potential effects from the Project in regards to community character and open space will be further discussed in Exhibit 4 of the Certificate Application.</p>
29	Maid, G.	29.2	In regards to PSS Section 2.16.1.1 on pages 86 & 87, List number 3, Commenter asks what study was done, or will be done, in these Towns, to prove that existing farms will be preserved by land lease payments. Commenter states land lease contacts in these towns severely restrict land use by the landowners, as the tenant dictates what can and cannot be done on the leased land.	A lease payment to agricultural landholders provides these individuals a stable source of income to hedge against volatility that has been experienced generally within the agricultural industry. The Certificate Application will provide a discussion of farming trends including conversion of traditional farming practices and the development of value-added activities such as Agricultural Support Businesses and Agri-Tourism. The Certificate Application will also include a discussion of how wind energy projects have been integrated into farming communities throughout New York State. A full assessment of coastal zone and LWRP issues will be provided as part of Exhibit 4 of the Certificate Application.
29	Maid, G.	29.3	In regards to PSS Section 2.16.1.1 on pages 86 & 87, List number 7, Commenter asks what study was done, or will be done, in these Towns, to prove the claim that flooding and erosion will not affect ecology.	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues and consistency will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>In addition to responses provided throughout this response document, a Preliminary Stormwater Pollution Prevention Plan and Erosion and Sediment Control Plan will be included with the Certificate Application.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
29	Maid, G.	29.4	In regards to PSS Section 2.16.1.1 on pages 86 & 87, List number 10. Commenter states wind turbines are placed in thousands of tons of concrete, and all leak lubricants and asks what study was done, or will be done, in these Towns, to prove there will not be any environmental impact ?	At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.  In addition to responses provided throughout this response document, a Spill Prevention Control and Containment Plan and Preliminary Stormwater Pollution Prevention Plan will be provided in the Certificate Application.
29	Maid, G.	29.5	In regards to PSS Section 2.16.1.1 on pages 86 & 87, List number 12. The commenter states the LWRP's are intended to preserve and protect the area, with clearly stated and specific regulations on how the Towns wish to achieve that goal. Commenter states that although the LWRP document as a whole was intended to preserve the waterfront area, there were 44 specific regulations that govern development.	At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.
29	Maid, G.	29.6	In regards to PSS Section 2.16, commenter notes Lighthouse Wind states in the PSS, page 87, the Project requires permits and approvals from the Town of Yates to be in accordance with the LWRP. Commenter states rules for permits and approvals granted by the Town of Yates are spelled out on Yates Local Law #1, which among many other things, require that an EIS be done.  Commenter states that Lighthouse Wind knows, or has cause to know, that an EIS is required at this time and an EIS must start with a baseline. Commenter states any data collected regarding wildlife migration should encompass several migration cycles and asks what study was done, or will be done, in these Towns, to be in accordance with these laws ?	An Environmental Impact Statement (EIS) will not be prepared for the Project because the State Environmental Quality Review process has been supplanted by Article 10. Wildlife studies will be conducted as described in PSS Section 2.7.3 (and as developed in consultation with the relevant agencies). A full assessment of coastal zone and LWRP issues will be provided as part of Exhibit 4 of the Certificate Application.
29	Maid, G.	29.7	In regards to PSS Section 2.16, Commenter states Lighthouse Wind knows, or has cause to know, that any project of this type, to be in accordance with the LWRP and its referenced Local Law #1, requires the creation of an overlay district. When was the overlay district created ? Where is it ? Where is the required map ?	The Town of Yates enacted Local Law No. 1 of 2008, which established a Wind Energy Overlay Zone. However, representatives of the Town of Yates have stated that no overlay zone was ever geographically established. Therefore, no map is available. Lighthouse Wind respectfully refers commenter to the Town of Yates for questions regarding its enactment of local laws.
29	Maid, G.	29.8	Regarding PSS Section 2.16, the commenter states that Somerset LWRP Policies 25, 26, and 27 establish rules for development in the Town, to protect the esthetic, economic, and future values of lands. Commenter notes the PSS states "The Project is anticipated to be consistent with these goals as summarized above for the Town of Somerset", but believes this statement is unacceptable. Commenter states that Lighthouse Wind knows, or should know, that they are required to show how they are in compliance in the PSS document, and what data was used to derive such an opinion.  Additionally, commenter states that Lighthouse Wind has secured over 100 acres of farmland for this Project in Yates, which is just one of many instances that a development would impair the region, as listed in the LWRP. This is just one of many criteria that must be satisfied where any development plan would be allowed to continue, The PSS does not address any of these listed criteria in the LWRP.	At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
29	Maid, G.	29.9	<p>In regards to PSS Section 2.16, commenter claims Lighthouse Wind has not shown the need for this facility, and has certainly not shown how any need greatly outweighs what a project of this scope and magnitude would do to the Towns of Yates and Somerset. Commenter states the population of NYS has steadily declined in the last decade to use electricity resources and the Champlain Hudson Power Express and other grid updates have been developed to collect and route power to NYC, eastern NY, and the east coast. The commenter states, nonetheless, in providing proof on need for power generation, the LWRP requires an EIS.</p> <p>Commenter states these are requirements set forth in the PSS regulations, the filed PSS, and have not been addressed. Commenter asks when will the EIS be completed, and why the PSS state that compliance with the LWRP is anticipated when all indications show that it cannot be?</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>The principal function of the New York State Coastal Management Program is to provide a framework for government decision-making processes in the coastal zone and to balance the use of coastal areas and plan for the fact that certain uses are water dependent. The Coastal Management Program is based on 44 policies which are grouped into 11 categories. Local Waterfront Revitalization Programs (LWRPs), once approved by the NYS DOS, allow local governments the opportunity to adopt and implement their own coastal policies. A LWRP is essentially a refinement of the State's coastal policies, developed jointly by the State and a municipality. The LWRP is essentially a communities planning document for use of its waterfront.</p> <p>With respect to particular policies, the intent of the PSS was to describe how the Project's consistency with the State coastal policies and LWRPs will be addressed in the Application. For example, it has been recognized that the essence of Policies 1-5 is to encourage dynamic and working waterfront. The Policies seek to preserve the use of coastal lands for development that is water dependent. In this regard, the Application will consider these policies and how the Project can encourage economic activity with the coastal zone and LWRPs and foster use of the unique wind resource in the coastal area consistent with these policies. A number of the coastal policies have parallels that will be addressed throughout the Article 10 application.</p> <p>An Environmental Impact Statement (EIS) will not be prepared for the Project because the State Environmental Quality Review process has been supplanted by Article 10.</p>
29	Maid, G.	29.10	<p>In regards to PSS Section 2.16, commenter notes that Lighthouse Wind states that the location and footprint of the Project is not known and that the types and size of the equipment is not known, however the commenter notes that Lighthouse Wind repeatedly make claims that their project will have no effect on very sensitive and specific areas including EIS. Commenter asks how these claims can be made without data, and independent studies .</p>	<p>Studies to determine potential impacts will proceed as outlined in the PSS and any information regarding adverse impacts will be included throughout the Certificate Application. A full assessment of coastal zone and LWRP issues and consistency will be provided as part of Exhibit 4 of the Certificate Application.</p>
30	Bronson, C.	30.11	<p>In regards to PSS Section 2.16, Commenter states belief that it is well-known that this Project is totally contrary to any and all coastal management programs. The Towns of Somerset and Yates have their own coastal and shoreline management guidelines and industrial wind turbines have no place, either specifically or implied, in any waterfront revitalization.</p> <p>Commenter also asks Lighthouse Wind to cite the specific passages from both towns' written guidelines that show consistency with any plan developed by these two towns, and the industrial wind turbines with regard to "revitalization".</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>The principal function of the New York State Coastal Management Program is to provide a framework for government decision-making processes in the coastal zone and to balance the use of coastal areas and plan for the fact that certain uses are water dependent. The Coastal Management Program is based on 44 policies which are grouped into 11 categories. Local Waterfront Revitalization Programs (LWRPs), once approved by the NYS DOS, allow local governments the opportunity to adopt and implement their own coastal policies. A LWRP is essentially a refinement of the State's coastal policies, developed jointly by the State and a municipality. The LWRP is essentially a communities planning document for use of its waterfront. With respect to particular policies, the intent of the PSS was to describe how the Project's consistency with the State coastal policies and LWRPs will be addressed in the Application. For example, it has been recognized that the essence of Policies 1-5 is to encourage dynamic and working waterfront. The Policies seek to preserve the use of coastal lands for development that is water dependent. In this regard, the Application will consider these policies and how the Project can encourage economic activity with the coastal zone and LWRPs and foster use of the unique wind resource in the coastal area consistent with these policies. A number of the coastal policies have parallels that will be addressed throughout the Article 10 application.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
30	Bronson, C.	30.12	<p>Commenter requests Lighthouse Wind elaborates on the plan for contribution to any waterfront revitalization, specifically a "land and water use plan for managing natural, public, and developed waterfront resources."</p> <p>Commenter also requests Lighthouse Wind discuss their specific contributions to several factors, in summary, commenter asks/comments:</p> <ol style="list-style-type: none"> <li>1. What is to be developed and how? Describe its enhancement, or benefits to such.</li> <li>2. What varieties of fish, in what seasons, their lifecycle, reproductive capacities and the impacts of construction as it impacts tributaries in Somerset and Yates. List each animal, reptile, insect (we are fruit-growing and are dependent on certain insects, either to proliferate or to be minimized) that would be impacted. List a recognized study for each species and how this list, customized for the ecology of Somerset and Yates, shows an impact from the construction or presence of 600-ft industrial wind turbines.</li> <li>3. Using charts and tables provided by USGS and state/county soil maps, indicate the impact of industrial wind turbines that will effect flooding and erosion hazards, including construction vehicles' impact on eroding of topsoils, changes in drainage patterns brought about by either temporary or permanent alterations, Cement runoff, water runoff, and listing of each creek and tributary and plans to recognize it and to preserve it</li> <li>4. Define "General Policy", and explain what it refers to.</li> <li>5. What is meant by public access? Does this mean to waterfront, and what are the impacts?</li> <li>6. Commenter remarks that the waterfront area already has recreation, and turbines would not enhance this area.</li> <li>7. Commenter remarks that the historic lighthouse view will not be enhanced by wind turbines, and all 70 turbines will be visible due to the flat terrain. Commenter asks what Lighthouse Wind's plan is to enhance the historic and scenic resources with your project, asking to be specific to the town's resources.</li> <li>8. How will the remediation of any soils replace the layers that occur naturally? Explain your procedure for soil remediation in and around areas where construction occurs. How does bulldozing the top layers back into place equate what occurs without human disruption/destruction? Please cite studies where this has been done successfully.</li> <li>9. Explain Energy and Ice Management, why are these terms paired, and explain each in context of this general category. Does this deal with turbine blade ice or shoreline ice, please clarify.</li> <li>10. Is there a plan to use lake water for construction processes, as in cement manufacture, cooling, or other? What is meant by Water Resources?</li> <li>11. What is meant by Air Resources, clean air, wind? Please clarify.</li> </ol>	<p>The commenter appears to be referring to the list of categories identified in Section 2.16.1 of the PSS. These categories are meant to summarize the 44 policies in the New York State CMP. At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>In regards to the commenter's specific questions, many of these will be addressed in other Exhibits included in the Certificate Application. For example, proposed facilities will be identified in Exhibit 3 of the Certificate Application. Fish and Wildlife present in the Project site and potential impacts will be discussed in Exhibits 22 and 23 of the Certificate Application. Potential effects on flooding and erosion hazards will be discussed in Exhibits 21 and 23 of the Certificate Application. Visual impacts will be discussed in Exhibit 24 of the Certificate Application. Land use will be discussed in Exhibit 4, and soil impacts in Exhibit 21 of the Certificate Application. Energy and Ice Management are paired as ice management is in regards to shoreline ice and how it can affect, or be affected by energy facilities. Water resources will be discussed in Exhibit 23 of the Certificate Application. Air resources in the NYS CMP refer to air quality. As indicated in PSS Section 1.2, Exhibit 17 regarding air emissions is not anticipated to be applicable to the Project.</p>
50	Atwater, R.	50.5	<p>Commenter states Lighthouse Wind should include maps showing designated coastal areas, inland waterways and local waterfront revitalization program areas; groundwater management zones; designated agricultural districts; flood-prone areas; and critical environmental areas designated pursuant to the State Environmental Quality Review Act.</p>	<p>Mapping included in the Certificate Application will be compliant with the requirements of Article 10 Part 1001 (Content of an Application) and as described in the PSS.</p>
50	Atwater, R.	50.8	<p>Commenter requests Lighthouse Wind provides an analysis of conformance with relevant provisions of the Coastal Zone Management Act, and proposed or adopted plans for inland waterways and local waterfront revitalization areas.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p>
94	Schwabel, P. and P.	94.1	<p>Commenter is concerned about the potential for overriding burdensome local laws. Commenter asks Lighthouse Wind if the State of New York's laws related to coastal management and LWRP policies as being separate and different from local laws."</p>	<p>New York State Coastal Policies are promulgated and approved by the Federal Government as part of the Coastal Zone Management Act. LWRP's are planning documents whose goals can be incorporated into local laws and zoning regulations in a local community. The Project is not required to "override" Coastal Policies or the goals of the LWRPs, but rather is required to show consistency with these policies to the extent it is determined that the Project will have an impact on coastal areas.</p>
94	Schwabel, P. and P.	94.2	<p>Commenter asks if Lighthouse Wind plans to propose that the respective towns' LWRP policies (state-approved and authorized by the state legislature) are "burdensome".</p>	<p>To the extent that the comment is asking whether or not Lighthouse Wind intends to request that the Siting Board "set aside" the LWRPs, Lighthouse Wind does not anticipate doing so. Rather, the Application will explain how the Project is consistent with the LWRPs and the policies seeking to promote certain uses to the extent it is determined that the Project will have an impact on coastal areas.</p>
94	Schwabel, P. and P.	94.3	<p>Commenter asks how Lighthouse Wind will proceed if they prepare a town's required waterfront assessment form and that form is not accepted and/or approved by the town in question?</p>	<p>The Comment is referring to a procedural requirement supplanted by PSL Section 172. Lighthouse Wind is not required to seek approval from the local government under a procedure in the local law requiring submission of a waterfront assessment form.</p>
94	Schwabel, P. and P.	94.4	<p>Commenter questions if, in the process of the consultation with the towns that Lighthouse Wind says they will do in regard to issues related to coastal management and local waterfront revitalization programs, an impasse is reached, how will Lighthouse Wind proceed?</p>	<p>The intent of the consultations identified in this section of the PSS is to solicit information from the Towns regarding their LWRPs, any pertinent or related planning documents so that the information can be incorporated in the Article 10 application.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.61	<p>In regards to PSS Section 2.16, Commenter notes the Article 10 regulations require Lighthouse Wind to provide "a preliminary analysis of the consistency of the proposed facility with the enforceable policies of the New York State coastal management program or, where the action is in an approved local waterfront revitalization program area, with the local program." 16 NYCRR 1 0005(1)(2)(ix).</p> <p>Commenter argues that Lighthouse Wind is not allowed to remain silent until the application phase of Article 10, but is required to provide analysis of consistency in the PSS. Commenter states Lighthouse Wind does not provide any analysis in the PSS regarding consistency with either the NYS CMP or the Somerset LWRP. All conclusory statements regarding consistency should be removed from the PSS. Commenter states Lighthouse Wind must comply with the Article 10 regulations and provide adequate analysis of the claimed consistency in the PSS. Specifically, methodologies to evaluate the Project's consistency with the NYS CMP and Somerset's LWRP must be provided. These methodologies must include coordination with the New York State Department of State and the Town of Somerset.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>The principal function of the New York State Coastal Management Program is to provide a framework for government decision-making processes in the coastal zone and to balance the use of coastal areas and plan for the fact that certain uses are water dependent. The Coastal Management Program is based on 44 policies which are grouped into 11 categories. Local Waterfront Revitalization Programs (LWRPs), once approved by the NYSDOS, allow local governments the opportunity to adopt and implement their own coastal policies. A LWRP is essentially a refinement of the State's coastal policies, developed jointly by the State and a municipality. The LWRP is essentially a communities planning document for use of its waterfront.</p> <p>With respect to particular policies, the intent of the PSS was to describe how the Project's consistency with the State coastal policies and LWRPs will be addressed in the Application. For example, it has been recognized that the essence of Policies 1-5 is to encourage dynamic and working waterfront. The Policies seek to preserve the use of coastal lands for development that is water dependent. In this regard, the Application will consider these policies and how the Project can encourage economic activity with the coastal zone and LWRPs and foster use of the unique wind resource in the coastal area consistent with these policies. A number of the coastal policies have parallels that will be addressed throughout the Article 10 application.</p>
95	Vacco, D. (Town of Somerset)	95.E9.35	<p>Commenter requests Lighthouse Wind removes the claim that the Project is anticipated to be consistent with all applicable policies of the NYS CMP, stating it is unsubstantiated.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>The principal function of the New York State Coastal Management Program is to provide a framework for government decision-making processes in the coastal zone and to balance the use of coastal areas and plan for the fact that certain uses are water dependent. The Coastal Management Program is based on 44 policies which are grouped into 11 categories. Local Waterfront Revitalization Programs (LWRPs), once approved by the NYSDOS, allow local governments the opportunity to adopt and implement their own coastal policies. A LWRP is essentially a refinement of the State's coastal policies, developed jointly by the State and a municipality. The LWRP is essentially a communities planning document for use of its waterfront.</p> <p>With respect to particular policies, the intent of the PSS was to describe how the Project's consistency with the State coastal policies and LWRPs will be addressed in the Application. For example, it has been recognized that the essence of Policies 1-5 is to encourage dynamic and working waterfront. The Policies seek to preserve the use of coastal lands for development that is water dependent. In this regard, the Application will consider these policies and how the Project can encourage economic activity with the coastal zone and LWRPs and foster use of the unique wind resource in the coastal area consistent with these policies. A number of the coastal policies have parallels that will be addressed throughout the Article 10 application.</p>
95	Vacco, D. (Town of Somerset)	95.E9.36	<p>Commenter requests Lighthouse Wind removes the claim that the Project is anticipated to be consistent with the policies set forth in the Town of Somerset LWRP, stating it is unsubstantiated.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p>
95	Vacco, D. (Town of Somerset)	95.E9.37	<p>Commenter states methodologies to evaluate the Project's consistency with the NYS CMP and Town LWRP must be provided. These methodologies must include coordination with the NYSDOS and the Town of Somerset to assist in those evaluations.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E9.38	Commenter believes a mitigation/alternative that needs to be evaluated is restricting the turbines to a greater setback distance from the waterfront areas (commenter references' the Town Wind Energy committee's recommendations and the letter received from Fish and Wildlife.)	This comment misunderstands the purpose of the LWRPs as a planning tool for local communities regarding the balancing of promoting a working shoreline with preservation of coastal resources. The designation of an LWRP is for planning purposes, it is not an area for which setbacks would be applicable. Moreover, setbacks from an LWRP may be inconsistent with the policies and purposes of the LWRP.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.15	<p>Regarding PSS Section 2.16, commenter states Policy 25 of the LWRP acknowledges the value of coastal areas' visual resources. "When considering a proposed action, government agencies will ensure that it will be undertaken so as to protect, restore and enhance the overall scenic quality of the coastal area." The proposed wind energy conversion system Lighthouse Wind Project will have 600 foot towers that will not be "inconspicuous" and will certainly be visible from the shoreline and water. Commenter states that turbines by their design must be spread out along the Project area and are not able to be "clustered" to save open space as suggested by the LWRP policy 25 guidelines. The planned project turbines would be incompatible with sections of the LWRP and destroy the very asset that makes this area so unique and inviting to residents and businesses.</p> <p>Commenter notes Policy 9B of the LWRP states that Towns should avoid the siting of new facilities and access points which will compromise significant habitats. Commenter states placement of the Lighthouse Wind energy conversion system in land that is adjacent to the waterfront area of the Town of Yates will make this area less attractive and available for waterfront enhanced uses as listed in LWRP Policy 2D.</p> <p>Commenter states that small business can provide the economic development that the town needs. Siting the Project in the shoreline region will make the region less desirable or not viable for more compatible waterfront enhanced uses and economic development.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>Additionally, visual impacts will be analyzed as described in PSS Section 2.9.3. The results of this analysis will be included in Exhibit 24 (Visual Impacts) of the Certificate Application and socioeconomic impacts will be analyzed and included in Exhibit 27 (Socioeconomic Effects) of the Certificate Application.</p>
100	Abraham, G. (on behalf of Save Ontario Shores)	100.7	Commenter states the PSS notes that approximately 5,000 of the "project site" would be located within the designated coastal areas for Yates and Somerset. Accordingly, the commenter states that a complete application must be accompanied with proof that coastal consistency certifications from the two towns have been submitted to DOS.	At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.
102	Behnke, H. (DPS)	102.125	On page 85 of the PSS, Section 2.16.1, Lighthouse Wind states: "The proposed Project is anticipated to be consistent with all applicable policies of the New York State CMP" but no substantive explanation is made that demonstrates how the project development could be considered to be consistent with the NYS CMP, as expressed in the affected Local Waterfront Revitalization Programs of the Town of Yates, the Town of Somerset and the NYS CMP itself.	Because a Project Layout has not been finalized, it is unknown if any natural resources of the coastal area would be impacted by the construction or operation of the Project. At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.
102	Behnke, H. (DPS)	102.126	<p>At subsection 2.16.1.1 Local Waterfront Revitalization Areas, the PSS states: "Approximately 5,000 acres of the Project site are within the Towns of Somerset and Yates LWRP boundaries." Should the Project result in visual effects to adjoining municipalities including those with approved LWRPs, the Project sponsor's assessment of the consistency of the proposed Project and any certification of consistency necessary for federal permitting and licensing purposes must also address effects that occur outside of the municipalities where the Project is sited but where these effects could occur. In particular, the Town of Newfane LWRP Policy #25 states: "Protect, restore or enhance natural and manmade resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area" and cites views of the Lake Ontario shoreline and surrounds that are of particular importance including:• Views of Lake Ontario from Olcott, Krull Park, Route 18 and the street ends (Transit Road, Lockport-Olcott Road, Jackson Street, etc.) are excellent due to the high bluff elevation for overlook of the lake. • The "fishing village" atmosphere of Olcott Harbor and its shoreline from NYS Route 18 and the east sides of the harbor are a result of the calm water, boat moorings and the structures crowding the shore. • Views of Eighteen Mile Creek gorge (Route 18 bridge, railroad right-of-way at Burt, Burt Dam, Fisherman's Park, etc.) that include the gorge walls, trees, wetland vegetation and water in a serene setting.</p> <p>Due to the potential size and number of the structural components of the entire project, it is likely that these locally important views in Newfane and the shoreline of the Village of Olcott could be adversely affected as a result of development. Visual analyses of the Project conducted pursuant to Article 10 should include definition of project effects on these locally significant scenic resources.</p>	The Town of Newfane was included in requests to Towns and Historic Societies included in the visual study area for any or additional sensitive locations for consideration in the Visual Impact Assessment. In addition to resources provided by Towns in response to the information request, a list of potentially visually sensitive receptors/locations is also being developed. Lighthouse Wind will include views from Olcott, Krull Park, Route 19 and the street ends overlooking Lake Ontario, Olcott Harbor and its shoreline from NYS Route 19 and the east sides of the harbor, and views from Eighteen Mile Creek gorge in the Visual Impact Assessment.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.127	<p>For each of the thirteen broad policy issue areas identified in the PSS for the Town of Somerset (pages 86 87), the Project sponsor is required to identify the means and methods that will be used to achieve consistency with the cited LWRP policy statements. Further, similar demonstration shall be required for each applicable policy area identified in the Kendall, Carlton, Yates Joint LWRP that have not been identified in the PSS.</p> <p>Additionally, for each of the thirteen statements purported to specify how the Project would be consistent with the thirteen stated LWRP policy areas, the Project sponsors shall provide detailed analyses of the consistency of the Project with each of the affected LWRPs with cross-references to other documentation submitted pursuant to the Article 10 certification process.</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>The principal function of the New York State Coastal Management Program is to provide a framework for government decision-making processes in the coastal zone and to balance the use of coastal areas and plan for the fact that certain uses are water dependent. The Coastal Management Program is based on 44 policies which are grouped into 11 categories. Local Waterfront Revitalization Programs (LWRPs), once approved by the NYSDOS, allow local governments the opportunity to adopt and implement their own coastal policies. A LWRP is essentially a refinement of the State's coastal policies, developed jointly by the State and a municipality. The LWRP is essentially a communities planning document for use of its waterfront.</p> <p>With respect to particular policies, the intent of the PSS was to describe how the Project's consistency with the State coastal policies and LWRPs will be addressed in the Application. For example, it has been recognized that the essence of Policies 1-5 is to encourage dynamic and working waterfront. The Policies seek to preserve the use of coastal lands for development that is water dependent. In this regard, the Application will consider these policies and how the Project can encourage economic activity with the coastal zone and LWRPs and foster use of the unique wind resource in the coastal area consistent with these policies. A number of the coastal policies have parallels that will be addressed throughout the Article 10 application.</p>
DMM45	Albright, S.	DMM45.1	<p>Commenter reviewed state and local waterfront revitalization program laws and found many legally incompatible policies to the Lighthouse Wind proposal, quoting NYS Coastal Policies 23 and 26, Town of Yates LWRP Policies 18 and 27, and Town of Somerset LWRP Policy 1 (specifically 1.4 and 1.5).</p> <p>Commenter also states that NYS Coastal Policies are state laws and questions if Article 10 trumps local laws, how do state laws hold against Article 10?</p>	<p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application.</p> <p>PSL Section 172 provides that no state agency or municipality may impose additional approvals, consents, permits, certificates or other conditions on the construction of a major electric generating facility, where that facility is the subject of a pending Article 10 Certificate Application. To the extent that the substance of a state law applies to the Project, it will be discussed in the Certificate Application.</p>
<b>Demographic, Economic, and Physical Attributes of the Local Community</b>				
95	Vacco, D. (Town of Somerset)	95.E9.41	The commenter notes that the PSS Section 2.18 refers the reader to Section 2.12 for demographic, economic, and physical attributes of the local community, but Section 2.12 is only the Socioeconomic Effects section and does not include all of the demographic, economic and physical attributes of the communities impacted by this Project.	Demographic, economic and physical attributes of the community will be outlined within Exhibit 27 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E9.42	The commenter notes that the PSS Section 2.18 should refer to all of the appropriate sections here, but should also summarize all of the baseline attributes of the communities that will be generated for the environmental analysis.	Demographic, economic and physical attributes of the community will be outlined within Exhibit 27 of the Certificate Application. Baseline community attributes will also be incorporated into Exhibit 27.
<b>Other Material Issues Raised by the Public (PSS Section 2.19)</b>				
26	Maid, G.	26.2	Commenter notes that many public comments have been left unanswered, much of which are not categorized topics in the PSS and subsequent Certificate Application Exhibits. To claim that "No additional material issues have been raised by the public" is disingenuous. Lighthouse Wind should be required to review each log and entry in the comments tab and actually address each and every issue that has been raised since October 2014 and provide a legitimate answer.	It is Lighthouse Wind's intention to answer all material questions or concerns regarding the Project. Any additional questions left unanswered after this comment period may be asked during additional comment periods allotted within the Article 10 Application phase.
95	Vacco, D. (Town of Somerset)	95.64	Regarding PSS Section 2.19, the commenter states all of the issues commenter discusses below should be included in the Project scope and may require additional study before the Project proceeds.	Lighthouse Wind sincerely will assess the applicability of each of the material issues raised in the Towns comments for incorporation into the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.65	<p>The commenter includes "Insect and Bee Fatalities" as a Material Issue Raised by the Public. Commenter references a recent scientific study by Michael Dillon and Lusha Tronstad, PhD, Baseline Research for Long-term Effects of Wind Farms on Insects in Wyoming, available at <a href="http://www.uwyo.edu/wyndd/files/docs/reports/wynddreports/u13dil01wyus.pdf">http://www.uwyo.edu/wyndd/files/docs/reports/wynddreports/u13dil01wyus.pdf</a></p> <p>Because the Project is proposed to be sited in a heavily agricultural area, the commenter feels this issue must be studied before the Project can proceed.</p>	Lighthouse Wind offers to consult with both the NYSDA&M and the local office of the Cornell Cooperative Extension on this issue and will request their input on possible mitigation measures if such an impact is apparent or necessary.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.66	The commenter includes "Effect on Orchard and Field Crop Pollination" as a Material Issue Raised by the Public. Commenter states this issue is tied to the issue above (Insect and Bee Fatalities), however separate studies should be conducted to determine whether the industrial wind turbines have a detrimental impact on local agriculture.	Lighthouse Wind offers to consult with both the NYSDA&M and the local office of the Cornell Cooperative Extension on this issue and will request their input on possible mitigation measures if such an impact is apparent or necessary.
95	Vacco, D. (Town of Somerset)	95.68	The commenter includes "Lake Effect Snow and Potential for Increased Blade Icing and/or Ice Throw" as a Material Issue Raised by the Public. Commenter believes Lighthouse Wind fails to address the impact of Lake Effect snow on the operation of industrial wind turbines, total yearly electrical output, blade icing, ice throw, or the viability of the Project as a whole and the PSS must be modified and the Project Scope should be expanded to include a study of this critical issue.	As discussed in Section 2.3 of the PSS, local climatological data will be analyzed to determine the potential frequency of icing events in comparison with other wind farms in the region. Historical climatological data should reflect the meteorological lake effects in the region. Based upon the presence of other viable wind farms in the region, the lake effect is not expected to affect the viability of the Project as a whole.
95	Vacco, D. (Town of Somerset)	95.69	The commenter includes "The Potential for Increased Numbers of Crop Destroying Pests as a Result of Predator Die-Off (e.g. bats)" as a Material Issue Raised by the Public. Commenter argues that given that Somerset is largely agricultural with a high concentration of row crops and orchards, the Project Scope must include a detailed study of likely levels of bat deaths, how those deaths will impact populations of crop destroying insects, and whether higher levels of crop destroying insects could have a detrimental impact on agriculture in Somerset and Yates.	Bat risk is carefully evaluated and addressed in coordination with NYSDEC and USFWS, and will be included in the Certificate Application. However, studies on impacts to insect populations extend beyond the scope of the Article 10 regulations and have not been requested by the agencies.
95	Vacco, D. (Town of Somerset)	95.70	The commenter includes "High Levels of Public Opposition to Project as Shown by Surveys Conducted by Yates and Somerset" as a Material Issue Raised by the Public. Commenter believes the Project Scope should be modified to include an evaluation of public opinion as shown through scientific surveys conducted by the Towns of Yates and Somerset (see Exhibit 16 and 17 of the Comment Letter). Commenter states that Lighthouse Wind has failed to consider the large levels of public opposition revealed by the attached studies and the PSS should be modified to include a consideration of public opposition, and the Siting Board should consider such opposition a major factor in determining the suitability of the Project.	Lighthouse Wind has prepared and is implementing a Public Involvement Program (PIP) plan in accordance with the requirements of 16 NYCRR § 1000.4. Throughout the scoping process, during the preparation of the Certificate Application, and throughout the remainder of the Article 10 process, Lighthouse Wind will continue to implement the PIP and conduct outreach activities. While consideration of public opposition is outside of the Article 10 regulations for a PSS, Lighthouse Wind is committed to implementing the PIP and affording for opportunities for opponents to the Project to provide comments. The Siting Board will consider all material comments submitted during the certification process.
95	Vacco, D. (Town of Somerset)	95.E9.43	Regarding PSS Section 2.19, the commenter indicates, after looking at the work of the Somerset Wind Energy committee, the following issues were missed: the amount of materials that will be removed from the site or transported to the site, impacts to hunting in the Project area, impacts to the State Park, impact to the dark skies in Somerset and viewing of stars, liability issues for the Town, lifespan of the turbines/ removal bonds, mitigations such as baseline and post construction studies, homeland security (Air base impacts), power storage (installations of batteries), etc. (see report from Town of Somerset Wind Energy committee).	Lighthouse Wind believes that the PSS contains the information required by the Article 10 regulations. Land use impacts and impacts to parks and recreation will be discussed in the Certificate Application. All outdoor lighting on Project buildings will be downshielded and a lighting plan will be developed based on FAA guidelines to ensure aircraft safety. Impacts to military airspace and airports will be evaluated in Exhibit 25 of the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E16.1	Exhibit includes Town of Yates Results of Survey on the Lighthouse Wind LLC Project (dated 12/28/2015)	Exhibit noted.
95	Vacco, D. (Town of Somerset)	95.E17.1	Exhibit includes Town of Somerset results of the wind turbine survey conducted on 6/17/2015. Results dated 1/11/2015.	Exhibit noted.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.3	In regards to the PSS Executive Summary, commenter remarks that what is missing from the analysis in the PSS is any inclusion of the potential impacts as stated by residents, who know the existing physical setting better than Lighthouse Wind; local environmental groups, who have enumerated significant concerns; and other local and regional voices. Commenter states that Lighthouse Wind did not use the plethora of information and statistics and experience of local resources in its PSS to identify potential impacts and claims Lighthouse Wind's PIP has not been effective.	Lighthouse Wind has, and will continue to assess material issues raised by the public for incorporation into the Certificate Application based on applicability to the Project. Lighthouse Wind has prepared and is implementing its Public Involvement Program (PIP) plan in accordance with the requirements of 16 NYCRR § 1000.4. Throughout the scoping process, during the preparation of the Certificate Application, and throughout the remainder of the Article 10 process, Lighthouse Wind will continue to implement the PIP and conduct outreach activities.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.4	In regards to PSS Section 2.19, commenter feels Lighthouse Wind has not included any of the issues raised by the public. Commenter offers a few for example: Farmers have raised concerns about the turbines and their impact on orchards, people raised the issue of military flight obstruction, and there have been many concerns and issues that people have about how Lighthouse Wind's project will negatively impact local businesses that rely on tourism. Commenter states that input has been given by the public in the form of comments to the PSC, editorials, and the documents, website and Facebook page of an active opposition group. Commenter doesn't understand why Lighthouse Wind could not compile and incorporate and state how they will address the concerns.	Lighthouse Wind has, and will continue to assess other material issues raised by the public for incorporation into the Certificate Application based on applicability to the Project. Some of the specific issues raised by the public which are included for reference by the commenter are discussed in other areas within the PSS and therefore don't qualify as a separate or "other" material issues. Flight operations are specifically covered within Section 2.11 of the PSS and also other areas of the PSS. "Turbine locations and dimensions will be provided to the FAA and DOD for assessment of potential impacts to air traffic control" (page 75). Effects on businesses are briefly addressed within Section 1.5 of the PSS. The general topics provided as examples in the comment would be addressed at greater length in the Certificate Application Exhibits. For example, orchards would be discussed in Exhibit 4: Land Use, military flight would be discussed in Exhibit 25: Effect on Transportation, and local business and tourism would be discussed in Exhibit 27: Socioeconomic Effects. Public Outreach as whole is an important component of the Project; Lighthouse Wind has hosted multiple open houses, held numerous stakeholder meetings, launched its own Facebook page, attended local meetings, etc. Comments on the Project are addressed in multiple locations (this document included) and will continue to be addressed by Lighthouse Wind.
<b>Required State and Federal Authorizations (PSS Section 3/Application Exhibit 33)</b>				
95	Vacco, D. (Town of Somerset)	95.72	In regards to PSS Section 3, the commenter states that since the PSS omits substantial and necessary information about the Project it is currently impossible for the Town to identify and comment on what state and federal authorizations may be required for the Project.	This information will be included in Exhibit 33 of the Certificate Application. There will be additional opportunity for the public to provide comment and pose questions about the Project during the Article 10 Application phase.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.128	Commenter states Table 7 should include additional entries to address the proposed interconnection location and modifications of the site of the Somerset Generating facility, licensed by the Siting Board under PSL Article VIII in Case 80002; and modifications of the NYSEG switchyard and transmission line licensed by the PSC under PSL Article VII in Case 27313. Further, NYSDOT Highway Occupancy permits, including rights to install facilities within highway right of-way, will be needed.	Comment noted. We will be requesting the referenced Certificate Orders from DPS Staff and anticipate discussing the permitting implications of proposed modifications to regulated facilities with DPS Staff.
102	Behnke, H. (DPS)	102.129	Commenter states Table 8 should include the needed review by the U.S. Department of Defense for Military Operations Airspace.	Lighthouse Wind will consult with the U.S. Department of Defense regarding military operations airspace.
102	Behnke, H. (DPS)	102.130	Commenter states Consistency review and approval undertaken by the NYS Department of State (NYS DOS) is a requirement of any federal permitting or licensing action which has the potential to affect the coastal area pursuant to 15 CFR Part 930 Subpart D and is an integral part of the federal decision making process. It is not a State authorization. Similarly, the citation of the Coastal Zone Management Act of 1972, as amended (Section 307) as an applicable State Law and Regulation is incorrect and should be removed. Further, the statement: "Any Project requiring federal authorization or permits affecting the coastal area must obtain a Federal Coastal Consistency Certification ..." is incorrect and should be revised. Project sponsors proposing an activity or activities affecting the coastal area and requiring federal authorizations shall certify to the NYS DOS and to the federal authority from which a permit, license or other authorization is sought at the same time an application is made to the federal agency or agencies that the Project complies with and will be conducted in a manner consistent with the State's approved coastal program (15 CFR Part 930.57(a))."	Comment noted. Lighthouse Wind understands that the Project must obtain a consistency determination from the New York Department of State as a requirement of any federal permitting which has the potential to affect the coastal area and this review by DOS cannot be preempted by Article 10. Lighthouse Wind has consulted with DOS and is encouraged that DOS will work with Lighthouse Wind and DPS Staff during the Article 10 process to identify issues and concerns with respect to the consistency of the Project which can be addressed during Article 10 review.
DMM79	Jarvis, C.	DMM79.4	Commenter asks if Lighthouse Wind will have to go through a National or State environment review process. Commenter indicates local community is largely in opposition to Project.	The Article 10 regulations were established as the state process in which a proposed major electric power generating project, such as Lighthouse Wind's proposed Project, is reviewed for potential significant adverse impacts and risk to the environment. The Article 10 process culminates in a decision on whether the Project should be granted a Certificate of Environmental Compatibility and Public Need by the Siting Board on Electric Generation, which includes representatives from both the NYS Department of Public Service and the NYS Department of Environmental Conservation. The Project will also apply for certain federal discretionary approvals such as a Section 404 permit for potential impacts to wetlands and streams.
DMM88	Wayner, R. (Somerset Town Councilman)	DMM88.2	Commenter indicates that the advent of Article 10 is a direct attack on home rule and objects to it strongly.	Lighthouse Wind believes the Article 10 process allows for continued community involvement and thoroughly encourages this involvement. Lighthouse Wind sincerely hopes to continue working with the local community and municipal governments to favorably site the Project.
DMM100	Esposito, J.	DMM100.1	Commenter is opposed to the Article 10 process and believes it takes away the rights of towns and individuals.	Lighthouse Wind believes the Article 10 process allows for continued community involvement and thoroughly encourages this involvement. Lighthouse Wind sincerely hopes to continue working with the local community and municipal governments to favorably site the Project..
DMM104	Arlington, D.	DMM104.1	Commenter is opposed to the Article 10 process and the make-up of the Siting Board.	Lighthouse Wind believes the Article 10 process allows for continued community involvement and thoroughly encourages this involvement. Lighthouse Wind sincerely hopes to continue working with the local community and municipal governments to favorably site the Project.
<b>Applicable State Laws and Regulations (PSS Section 4/Application Exhibit 32)</b>				
95	Vacco, D. (Town of Somerset)	95.73	In regards to PSS Section 4, the commenter states the PSS does not contain the required statement demonstrating an ability to comply with applicable state laws and regulations. Instead, Lighthouse Wind states that it "will include a full assessment of compliance in the Certificate Application." PSS at p. 91. Commenter argues that Lighthouse Wind is not allowed to remain silent until the application phase of Article 10, but is required to provide a statement demonstrating an ability to comply with state laws and regulations in the PSS. Commenter feels Lighthouse Wind must revise the PSS to include the required statement.  Commenter states since the PSS omits substantial and necessary information about the Project it is currently impossible for the Town to identify and comment on all applicable state laws and regulations for the Project. The Town reserves its right to file additional comments as relevant information is revealed by Lighthouse Wind.	Lighthouse Wind has identified the applicable state and local laws and regulations based on the level of information available at this stage of pre-application phase of the Project. As more information is gathered from studies, the layout is refined, and additional land control is obtained, Lighthouse Wind will be able to further refine the list of applicable state and local laws. The lists provided in the PSS are based on familiarity with the applicable requirements as well as the typical provisions of State law affected by wind project development (i.e. wetlands permitting, 14.09 consultation, Section 68 of PSL). PSL Section 172 provides that no state agency or municipality may impose additional approvals, consents, permits, certificates or other conditions on the construction of a major electric generating facility, where that facility is the subject of a pending Article 10 Certificate Application. To the extent that the substance of a state law applies to the Project, it will be discussed in the Certificate Application.
DMM79	Jarvis, C.	DMM79.3	Commenter states that they recently read an article about how some wind projects green credits are used to promote the pollution of air. Commenter asks if there is any stipulation in Article 10 that prevents this.	The Article 10 regulations establish procedures for review of construction and operation of major electric generating facilities and are implemented independently from renewable energy credit or trading programs.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
<b>Local Laws and Regulations (PSS Section 5/Application Exhibit 31)</b>				
21	Spitzer, D. (Attorney for Town of Yates)	21.11	Town of Yates asserts that the "Application Requirements for [WECS]", or Section 591.8 of the Zoning Laws for the Town, are substantive in nature and are necessary for a proper analysis of the Project during the Article 10 review process. Commenter clarifies that since requirements A.1 through A.20 provide substantive information on the Project and will facilitate a thorough review of the same, Lighthouse Wind should be required to provide this information as part of its application to the Siting Board.	In enacting Article 10, the State occupied the field regarding all procedural requirements or local approvals which would otherwise apply to a major electric generating facility. NY Public Service Law § 172(1) states that "No state agency, municipality or any agency thereof may, except as expressly authorized under this article by the Board, require any approval, consent, permit, certificate or other condition for the construction or operation of a major electric generating facility with respect to which an application for a certificate hereunder has been filed." Application requirements fall under the scope of this preemption; they are procedural submissions which must be made to a local government, for a local government's purposes. However, as Lighthouse Wind noted in the PSS Section 5.3, the proposed Project still complies with almost all of the substantive requirements of the Town of Yates' local laws applicable to wind uses, as well as the specific application requirements cited by Commenter. Yates Zoning Law Section 591.8 items A.1 through A.20 list information and studies which are all contained within the Article 10 regulations' required submissions for an Application, with one exception--Article 10 does not require that an Applicant engage a licensed appraiser to perform a property value analysis. In order to submit a complete Application which complies with the Article 10 requirements, Lighthouse Wind will be providing all of the other information called for in the Yates law and will address property values through a literature review of studies that have evaluated such potential impacts from wind farm projects.
21	Spitzer, D. (Attorney for Town of Yates)	21.12	Commenter notes that the Town has opted out of the RPTL § 487 tax exemption Section 591.41 of the Local Law. Commenter also suggests that the impact on viability of the Project if no IDA or Town PILOTs are available should be addressed.	In its Article 10 Application, as part of Exhibit 27 (Socioeconomic Effects), Lighthouse Wind will identify taxing jurisdictions within which the Project would be located, and "any entity from which payments in lieu of taxes will or may be negotiated." 16 NYCRR § 1001.27(h). Further, Lighthouse Wind must provide, "for each jurisdiction, an estimate of the incremental amount of annual taxes (and payments in lieu of taxes, benefit charges and user charges) it is projected would be levied against the post-construction facility site, its improvements and appurtenances," and "For each jurisdiction, a comparison of the fiscal costs to the jurisdiction that are expected to result from the construction and operation of the facility to the expected tax revenues (and payments in lieu of taxes, benefit charge revenues and user charge revenues) generated by the facility." 16 NYCRR § 1001.27(i)-(j). If, at the time of the Application, a tentative plan for any PILOT agreement is being negotiated, the relevant materials and information related to that proposed PILOT will be included along with the Application. In addition, an evaluation will be made regarding the economic considerations of each of the Project Alternatives (including a No-Build Alternative) and feasibility of the Project will be considered in these evaluations, as part of Exhibit 9 (Alternatives).
28	Maid, G.	28.1	In regard to PSS Section 5.3.2, commenter states that as proposed, the Lighthouse Wind project is in violation of turbine height limit of 420 feet, by as much as 200 feet. Commenter states it is also in violation of setback minimums along with a few other sections listed in PSS Section 5.3.2. No overlay district(s) have been identified or created in this matter.  As in other matters in the PSS, commenter states that merely stating that Lighthouse Wind is not in compliance with the local laws and will request that the Board make a determination during the Certificate Application phase again removes the ability of the public to comment now.	The PSS identifies areas where the Project, as currently proposed, cannot meet the substantive requirements of the local law and indicates that it anticipates requesting the Siting Board to set aside these requirements as unreasonable burdensome. This will be further explained and substantiated in the Application, however, for pre-application purposes, Lighthouse Wind has identified these areas and has received, reviewed and responded to public comments on these areas.
28	Maid, G.	28.2	In regard to PSS Section 5.3.2, commenter states the filed PSS does not give any explanation for a request for an unreasonably burdensome determination. Commenter states this is yet another shortcoming of the PSS.	Under 16 NYCRR 1001.31(e), an Applicant can seek to waive a substantive local law requirement where it demonstrates to the Siting Board that "as applied to the proposed facility such are unreasonably burdensome in view of the existing technology or the needs of or costs to ratepayers." As stated in the PSS, Lighthouse Wind anticipated that its project would comply with most applicable zoning requirements in place at the time the PSS was filed. However, where the studies and analysis undertaken in the pre-application stages indicate that a waiver from certain local requirements may be necessary, the Application Exhibit 31 will include a detailed description of the provisions of local law for which a waiver is requested, and the reasons justifying such a waiver. It would be up to the Siting Board to determine whether such a waiver is granted.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
28	Maid, G.	28.3	In regard to PSS Section 5.3.2, on the subject of turbine height, size, noise levels and setbacks, etc., the commenter states that there appears to be a concern that laws enacted by the community might be "unreasonably burdensome" to a wind facility developer. Commenter notes these laws were enacted by the leadership of the community for a reason so that the installation of "620 foot industrial wind turbines", or any other industry, wouldn't be unreasonably burdensome to the town and community.	Under 16 NYCRR 1001.31(e), an Applicant can seek to waive a substantive local law requirement where it demonstrates to the Siting Board that "as applied to the proposed facility such are unreasonably burdensome in view of the existing technology or the needs of or costs to ratepayers." As stated in the PSS, Lighthouse Wind anticipated that its project would comply with most applicable zoning requirements in place at the time the PSS was filed. However, where the studies and analysis undertaken in the pre-application stages indicate that a waiver from certain local requirements may be necessary, the Application Exhibit 31 will include a detailed description of the provisions of local law for which a waiver is requested, and the reasons justifying such a waiver. It would be up to the Siting Board to determine whether such a waiver is granted. The potential impacts turbine height, size noise levels and setbacks will be addressed in the application, in addition to an assessment of alternatives. These will all be factors considered by the Siting Board in making its determination with respect to the adherence and applicability of local laws.
28	Maid, G.	28.4	With respect to Orleans and Niagara County IDAs, the commenter states both counties require application and approval for industrial development in their respective counties. Commenter claims that Lighthouse Wind, a private corporation from Virginia, by way of a land lease contract with private citizens, without the knowledge, approval or consent of the local and county governments, is allowed to dictate where and to what scale a municipality's industrial zones will be. Commenter states this sort of overreach is not permitted in any other industrial development type except for those covered by Article 10.  Commenter notes, like local law #1 stated earlier, the PSS makes mention of IDA interaction, however fails to explain the reason Lighthouse Wind looks for exemption from existing local law by the Siting Board. Commenter feels the PSS falls short in satisfying the requirements set forth in 1000.5 of Article 10.	While the comment primarily is a concern with the Article 10 process and not the Project itself, it is worthwhile pointing out that the State Legislature, in enacting Article 10, recognized that certain decisions regarding the location and siting of major electric generating facilities, such as a wind farm project, are heavily dependent on specific locations where the resource is available and that there are compelling state-wide reasons to have the State issue certificates for the construction and operation of such projects rather than a patchwork of state and local governments.
37	Crafts, C.	37.4	Commenter notes that Article 10 projects such as the Project are of a certain character and of great enough size that they are exempted from environmental review prior to construction.  There are some local standards as to how large local wind towers might be, there as some plans about how to revitalize the Lake District, the Wine Trail, and other ways, like NYS STEM, that also look to grow the future of the area. We have not seen a combining with these renewal efforts with Lighthouse Wind's plans, only the Article 10 hint that all local standards will be overruled as "too restrictive".	The Article 10 process is designed to incorporate environmental review into a streamlined review process. Lighthouse Wind will include a more detailed description of the provisions of local law for which they may request a waiver. The Siting Board will ultimately determine if such a waiver is granted.
50	Atwater, R.	50.11	Commenter notes the Project is entirely incompatible with the comprehensive plans for both the Town of Somerset and Orleans County. Commenter believes that property values would suffer dramatically as prospective residents would be much less likely to settle here. Our schools, churches and community organizations are struggling as it is and the industrialization of the landscape would not help the situation.	Generally, Exhibit 4 of the Certificate Application will address the concerns identified by the Commenter. Exhibit 4 on Land Use will review the Comprehensive Plans and address consistency with the policies and goals of such plans. Further, there is no evidence that the existence of a wind farm project leads to people deciding not to live in a community, which is a fact supported by the many studies showing that wind farm projects do not impact property values. These studies will be extensively reviewed in the application. In fact, because of the positive impact to municipal budgets associated with wind farm projects, through host community and PILOT payments, the resulting tax benefits can enhance the desirability of a community. In addition, the benefits provided from wind farm projects in other communities in New York have enabled the enhancement of civic institutions, such as schools, churches and community organizations. For example, the PILOT payment will provide for direct payments to the local school districts on an annual basis. These types of benefits help sustain and grow local budgets assisting the local economic development of a community.
95	Vacco, D. (Town of Somerset)	95.74	Regarding PSS Section 5, commenter states the PSS only contains a general table of local Somerset laws applicable to the Project with a short note whether Lighthouse Wind intends to comply with the local law or seek to have the Board not apply the local law. However, there is absolutely no explanation as to why the Board should elect not to apply any specific provision of Somerset's local laws. The Article 10 regulations require that Lighthouse Wind provide an explanation as to why it believes the Project should not have to follow all applicable local laws. Lighthouse Wind must revise the PSS to include this required explanation.	In accordance 16 NYCRR § 1000.5(1)(5), Lighthouse Wind has provided a preliminary assessment of their ability to comply with local laws and regulations (for the Town of Somerset's laws see PSS Section 5.2.2, Table 9). In these preliminary assessments of compliance, Lighthouse Wind has indicated that it may request that the board elect not apply certain provisions, but at this time has not determined if it will do so. In the Certificate Application, Lighthouse Wind will provide explanations as to why the Siting Board should elect not to apply any specific provision of local laws that it may find unduly burdensome as applied to this Project, as set forth in 16 NYCRR 1001.31(e). This standard looks at the burden of applying the local law "in view of the existing technology or the needs of or costs to ratepayers." As stated in the PSS, Lighthouse Wind anticipates that its project would comply with most of the applicable zoning requirements in place at the time the PSS was filed. However, where the studies and analysis undertaken in the pre-application stages indicate that a waiver from certain local requirements is necessary, the Application Exhibit 31 will include a detailed description of the provisions of local law for which a waiver is requested, and the reasons justifying such a waiver. It would be up to the Siting Board to determine whether such a waiver is granted.
95	Vacco, D. (Town of Somerset)	95.75	Somerset does not concede that the Siting Board has the power to "waive" local laws in violation of Article IX of the New York State Constitution.	This comment does not address content of the PSS, but is a general argument regarding the Article 10 statute. We refer commenter to Public Service Law § 172(1).

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.76	Commenter claims that Lighthouse Wind is well aware of the fact that Somerset is in the process of revising its local laws applicable to the Project. Commenter states that although Somerset included Lighthouse Wind in the revision process, and Lighthouse Wind has actively participated in the revision process, Lighthouse Wind fails to mention anywhere in the PSS the fact that Somerset's local laws are currently being revised.	At the time of the submission of the PSS, there was no proposed amendment to Somerset's local zoning laws or wind law. In fact, Somerset's Wind Committee had not made any formal recommendations or any other proposal. At that time, based on Lighthouse Wind's involvement in the Committee, it was not known how the Town would proceed, if at all. However, over two years since Lighthouse Wind first appeared before the Town Board to discuss the Project, a year after the filing of the PIP, and months after the filing of the PSS, the Town Board only recently announced it was proposing to amend its wind law to enact provisions which, in essence, significantly reduces the possibility of locating a wind farm project in the Town of Somerset. It is Lighthouse Wind's understanding that many members of the public have submitted comment on the proposed law, which has been revised, and at this time, it is unknown whether or not the Town will amend its law.
96	Kremer, K. (Save Ontario Shores, Inc.)	96.16	In the Zoning Law of the Town of Yates, Section 591.3 there are numerous areas of concern when wind energy projects are not properly sited. They include aesthetic impacts, wildlife populations and the health, safety and welfare of neighboring property owners and the general public. Commenter states all of these concerns are at issue with the placement of 600 foot wind turbines in a region that is immediately adjacent to the Local Waterfront Revitalization Area and raises the concern that this Project is not properly sited.  Commenter states the purpose of these zoning regulations is clearly stated in Section 102 E. to include: "To encourage the use of the Lake Ontario Waterfront in the Town of Yates, as a unique resource and to protect it from incompatible uses that may compromise the aesthetic quality of the area, increase the potential for flooding and erosion, or damage the natural environment in a way that restricts its use and enjoyment by the residents of the Town." Commenter expresses that these are some examples of sections of local laws that are incompatible with this Project. The PSS does not name the concerns and does not state how, in the Application, Lighthouse Wind will address these issues.	In accordance 16 NYCRR § 1000.5(l)(5), Lighthouse Wind has provided a preliminary assessment of their ability to comply with local laws and regulations. The preliminary assessment of compliance for the Town of Yates' laws is included in Section 5.3.2, Table 10 of the PSS. Additionally, a preliminary assessment of LWRP policies was provided in Section 2.16 of the PSS. In these preliminary assessments of compliance, Lighthouse Wind has indicated that it may request that the Siting Board elect not to apply certain provisions, but at this time has not determined if it will do so. The Certificate Application will include a detailed analysis of the Project's consistency with local laws and regulations.
102	Behnke, H. (DPS)	102.131	The PSS at subsection 5.2.1 indicates that requirements of Town of Somerset Section 171 Subdivisions would be supplanted by Article 10 (PSL 172). The Siting Board does not have the authority to grant property rights, so this citation is incorrect. DPS Staff requests that an explanation as to why subdivisions would be necessary for the Project be provided.	Lighthouse Wind agrees that local subdivision processes are not preempted by Article 10. Lighthouse Wind anticipates that easement or lease agreements with landowners will constitute the majority of land holdings to be acquired. However, if Lighthouse Wind chooses to purchase property rights and subdivision becomes necessary, Lighthouse Wind will include an evaluation of the Town of Somerset Section 171 Subdivisions local law in the Certificate Application.
102	Behnke, H. (DPS)	102.132	The PSS at subsection 5.2.2 indicates under the heading "Preliminary Assessment of Compliance" with Somerset Section 204-43.2(C)(1)(e), that compliance with the following standard is anticipated: "Setback a minimum of 1.5 times the total WECS height from any aboveground transmission line greater than 12 kilovolts, excluding where transmission lines are located within PUD Zones." DPS Staff advises that the PSC established a setback policy generally requiring wind turbines to be set back a minimum of 1.5 times maximum tip height from overhead electric transmission facilities operating at 115 kV or higher (see Case 07-E-0213 -- Petition of Sheldon Energy LLC for an Original Certificate of Public Convenience and Necessity on Regulatory Regime Pursuant to Public Service Law Section 68, Order Granting Certificate of Public Convenience and Necessity, and Providing for Lightened Regulation (issued and effective January 17, 2008) ("In the future, we may, as conditions warrant require a minimum setback distance of 1.5 times maximum turbine blade tip height from the edge of the right-of-way of any electric transmission line designed to operate at 115 kV or more" (footnote, pg. 12)).	The preliminary assessment of compliance in this Section refers only to a specific provision of the Town of Somerset. Proposed setbacks will be identified in the Certificate Application.
102	Behnke, H. (DPS)	102.133	The PSS at 5.2.2 indicates that Preliminary Assessment of Compliance with Somerset Section 204-43.2(C)(7) compliance with LWRP is not addressed "because the location of Project Components has not been identified." The proposed point of interconnection to the electric grid at the Somerset switchyard is the only project component that has been identified. The Revised Scoping Statement should address this facility location in terms consistency with the LWRP.	A more detailed evaluation of compliance with these provisions will be included in the Certificate Application.
102	Behnke, H. (DPS)	102.134	The PSS at 5.3.2 indicates that compliance is anticipated with setback provisions in Yates Code Section 591.13 Setbacks for Wind Energy Conversion Systems (PSS pg. 101). DPS Staff notes that indicated setback distances were established for turbines with a maximum height limitation of 420 feet (Section 591.10 A.13). DPS Staff advises that taller turbines, as proposed by Lighthouse Wind for the Project, will of necessity be subject to larger setback distances from public roads, boundary lines and potentially to residences.	A more detailed evaluation of compliance with these provisions will be included in the Certificate Application. Lighthouse Wind has also provided a figure demonstrating the setback distances in which the Project must comply as Appendix D to this response document.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
110	Isselhard, A.	110.16	Commenter believes that the Project is breaking several laws, such as having turbines higher than the 420' maximum in the Town of Yates, NYS Coastal Policies 23 and 26 violations, Yates LWRP policy 18, 26, and 38 violations, and Somerset LWRP policies 1, 2, and 3 violations.	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Under 16 NYCRR 1001.31(e), an Applicant can seek to waive a substantive local law requirement where it demonstrates to the Siting Board that "as applied to the proposed facility such are unreasonably burdensome in view of the existing technology or the needs of or costs to ratepayers." As stated in the PSS, Lighthouse Wind anticipates that the Project would comply with most applicable zoning requirements in place at the time the PSS was filed. However, where the studies and analysis undertaken in the pre-application stages indicate that a waiver from certain local requirements may be necessary, the Application Exhibit 31 will include a detailed description of the provisions of local law for which a waiver is requested, and the reasons justifying such a waiver. It would be up to the Siting Board to determine whether such a waiver is granted. The potential impacts of turbine height will be addressed in the Certificate Application, in addition to an assessment of alternatives. These will all be factors considered by the Siting Board in making its determination with respect to the adherence and applicability of local laws.</p> <p>With respect to turbine heights, as stated elsewhere in this response document, Lighthouse Wind will review the sufficiency of setback distances in local codes based on the height of the selected turbine, or the largest turbine alternative if a specific turbine has not been selected at the time of Application filing.</p> <p>At this time, Lighthouse Wind does not propose to place any wind turbines within the Joint Kendall, Yates, Carlton LWRP area. However, to the extent that Project components are proposed for areas in the coastal zone or covered by the Town of Somerset LWRP, such as an interconnection at the Kintigh Power station, a review of the Somerset LWRP and State Coastal policies will be included in the Application, as required by Article 10. A full assessment of these issues will be provided as part of Exhibit 4 of the Certificate Application</p>
<b>Description of the Applicant's Property Rights and Interests (PSS Section 7)</b>				
95	Vacco, D. (Town of Somerset)	95.77	Commenter states on page 102 of the PSS, Lighthouse Wind acknowledges that it is a wholly owned subsidiary of Apex Clean Energy Holdings, LLC. As a result, in analyzing alternatives to the Project, all holdings of Apex Clean Energy and its affiliates should be evaluated as potential alternative sites. To that end, the PSS should be resubmitted with a complete list of land currently owned or leased by Apex Clean Energy LLC or its affiliates. The list should also state whether the land currently has industrial wind turbines, and if not whether necessary government approvals have been granted.	As stated in the PSS, Lighthouse Wind currently has no land holdings and therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components. Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout and will provide this information as soon as it is available. There is no requirement within the Article 10 regulations to reveal affiliate land holdings; the only requirement is to reveal affiliate relationships, which Lighthouse Wind reveals within the PSS.
95	Vacco, D. (Town of Somerset)	95.78	In regards to PSS Section 7, commenter states Lighthouse Wind has not provided a description of its property rights and interests, and therefore the PSS should be stricken as premature and Lighthouse Wind should be required to file a new PSS with additional required information. Commenter believes Lighthouse Wind must be required to provide a full list of all land currently under lease. In addition, maps of the leased land should be provided in accordance with applicable regulations.	As stated in the PSS, Lighthouse Wind currently has no land holdings and therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components. Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout and will provide this information as soon as it is available. A statement that Lighthouse Wind has obtained, or can obtain, such deeds, easements, leases, licenses, or other real property rights or privileges as are necessary for all Project facilities, including interconnections for the facility will be made within the Certificate Application, per 1001.13. Lighthouse Wind will demonstrate within the Certificate Application by a list, maps, or other means, lands which are leased or planned to be leased and utilized for the Project. Lighthouse Wind believes it has provided the type of information that is required for a PSS during the Pre-Application phase of the Article 10 process.
102	Behnke, H. (DPS)	102.135	Commenter states the discussion in PSS Section 7 does not address real property rights or privileges to public lands, including the use of streets and highways for location of facilities including all interconnections.	The Article 10 Application will include maps identifying tax parcels within the Project site including tax parcel ID, land use and zoning information, easements (if any), grants and related encumbrances, and public and private roads planned for use as access to the Project site. Lighthouse Wind will work closely with all relevant highway department officials including the NYSDOT, Highway Departments in the Towns of Somerset and Yates, the Niagara County Department of Public Works, and the Orleans County Highway Department to secure road use agreements prior to construction and use of public roads. Lighthouse Wind intends on identifying all owners of record of any parcel included within the Project site and for all adjacent properties. The Certificate Application will provide a description of titles or leases for parcels that are secured or under option for the Project, including ingress/egress access to public roads, and will provide a statement that Lighthouse Wind has or can obtain access to parcels needed for title or lease interest in the Project. Please also note that Lighthouse Wind has been working with all public and private landowners to obtain leasing or easement rights for the Project and will continue to work towards securing all land necessary to construct and operate the Project. The Certificate Application will provide a statement that Lighthouse Wind has or can obtain access to parcels needed for the Project interconnects.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
<b>Other Application Exhibits not included in the PSS</b>				
49	Wolanyk, E.	49.5	Commenter claims that while the nacelle is a sealed mechanism, there are photos and videotapes of a nacelle leaking lubricating fluids down a tower which could enter the surface and ground waters as well as vaporize and could possibly cause air pollution. Commenter also states that there is footage of a nacelle catching fire and the resulting lubricating fluids creating plumes of black smoke - which would be an additional air and water pollution issue, and a fire hazard which the towns will need to address. Commenter requests a plan to address this issue and other pollution control measures.	<p>As stated in the PSS, the proposed Project is not expected to require pollution control facilities, as such, the requirements of the exhibit are not applicable to the Project. Wind turbines generate electricity without combusting fuel or releasing pollutants into the atmosphere. Because wind turbines generate electricity without releasing pollutants into the atmosphere, the proposed facility will not be subject to New Source Performance Standards, and will not require air pollution control permits under Clean Air Act or New York State law or regulation.</p> <p>Because this Project involves construction and operation of wind turbines, there are no "fuel-waste byproducts" which would be produced as a result of construction and operation of the facilities. As such, the statements regarding waste in accordance with 16 CRR-NY 1001.16 are not applicable to the Project. As required by Exhibit 23 of the Article 10 Application, Lighthouse Wind will include a description of spill prevention and control measures to be in place for any chemical, petroleum, or hazardous substances to be stored on-site (if any).</p> <p>Lighthouse Wind reaffirms its beliefs that Exhibits 16 and 17 are not required to be scoped in the PSS. During the site preparation and construction phases of the Project, temporary minor adverse impacts to air quality could result from the operation of construction equipment and vehicles. Such impacts could occur as a result of emissions from engine exhaust and from the generation of fugitive dust during earth moving activities and travel on unpaved roads. The increased dust and emissions will not be of a magnitude or duration that would significantly impact local air quality. Any impacts from fugitive dust emissions from travel on unpaved roads are anticipated to be short-term and localized and will be avoided or corrected quickly. The Certificate Application will provide further information on any Concrete Plant(s) if they are to be utilized.</p>
49	Wolanyk, E.	49.8	Commenter states that the PSS identifies certain exhibits that do not apply including Exhibit 41, Applications to Modify or Build Adjacent. Commenter believes that in areas where these industrial wind turbines have been built, the first section of industrial wind turbines placed are often followed by additional industrial wind turbines being built to take advantage of the infrastructure that is put in place. Commenter requests that if Lighthouse Wind will not build adjacent to this proposed Project, then it needs to be stated in PSS or the Application.	A description of the facility will be provided in the final Certificate Application.
97	Wasilewski, T.	97.10	Commenter is concerned about turbine life span and responsibility for decommissioning costs.	Exhibit 29 of the Certificate Application will include a plan for decommissioning and restoration of the site, including a description of how it will be funded and guaranteed.

Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.8	<p>The PSS does not address several of the topics listed as Exhibits in 16 NYCRR Part 1001. While Lighthouse Wind may not consider these topics relevant to the requirements of §1000.5, DPS Staff advises that details of several of these Exhibits are important components of an application, some of which require consultation with other parties or outside agencies, and proposals for fulfilling the information requirements of the Exhibits should be addressed in a revised Scoping Statement. Development of comprehensive stipulations should be contemplated as a goal of the Article 10 scoping process. Topics and specific exhibits not specifically addressed in the PSS as per the PSS Introduction (PSS pages 3 and 4) include:</p> <p>Exhibit 2 – public involvement program following submission of the application;</p> <p>Exhibit 3 – Location of facilities – including the Study Area definition, map of Project Layout, any alternative layouts;</p> <p>Exhibit 6 – wind power facilities – including setback requirements and recommendations, third-party turbine certification, and wind meteorological analyses;</p> <p>Exhibit 8 – Electric system production modelling – including consultations with DPS Staff and NYSDEC regarding acceptable input data for system-wide air emissions analysis, and simulation analysis based on assumed capacity factor for the facility (and basis thereof);</p> <p>Exhibit 10 – Energy planning objectives and impacts on Statewide system reliability, fuel diversity, planning objectives and minimizing public health and environmental impacts related to climate change;</p> <p>Exhibit 11 – Preliminary design drawings of facility components – drawing details appropriate for this exhibit including typical drawings and proposed standards for drawing submittal, lighting plans, underground and aboveground facility components, etc.;</p> <p>Exhibit 12 – Construction – including quality assurance and control and public complaint and dispute resolution procedures;</p> <p>Exhibit 13 – Real property – mapping details appropriate for this exhibit's requirements;</p> <p>Exhibit 14 – Cost of facilities – including description of categories for the rational breakdown of cost components for this exhibit;</p> <p>Exhibit 18 – Safety and security – proposed access controls and setback considerations, lighting and aircraft safety, preliminary community safety Response plan components and emergency first-responder notification;</p> <p>Exhibit 29 – Site restoration and decommissioning – including proposed performance criteria for site restoration, hazards removal, and guaranty/security agreements between the landowners, municipalities and other entities;</p> <p>Exhibit 31 – Local laws and ordinances – report on status of consultations with municipalities and other agencies regarding local legal provisions applicable to the proposed facilities; lists of all local legal provisions applicable – not limited to wind energy siting requirements;</p> <p>Exhibit 34 – Electrical interconnection – indication of the location of facilities and length of transmission line; local laws compatibility, noise and visual effects analyses, etc.;</p> <p>Exhibit 38 – Water interconnection – and Exhibit 39 – Wastewater interconnection – potential for and description of facilities necessary for development of an Operations and Maintenance Center or similar facility component;</p> <p>Exhibit 40 – Telecommunications Interconnection – preliminary information regarding system control, communications and relays necessary for system communication and control.</p>	<p>As identified in Section 1.2 of the PSS, Exhibits 2, 3, 6, 8, 10, 11, 12, 13, 14, 18, 29, 31, and 32 will be included in the Certificate Application as required under 16 NYC Part 1001.</p> <p>In addition to the specific responses provided throughout this document, Lighthouse Wind confirms the following information will be included in the Certificate Application. The PIP will continue to be implemented following submission of the application, as will be indicated in Exhibit 2. Exhibit 3 will include the Study Area definition, maps of the Project layout and any alternative layouts. Exhibit 6 will include setback requirements and recommendations, certifications, and meteorological analyses. A setback map has been provided as Appendix D to this response document. Lighthouse Wind will consult with DPS and NYSDEC regarding input data for electric system production modelling and simulation analysis will be included in Exhibit 8. Lighthouse Wind will discuss the requirements of Exhibits 10, 11, 12, and 13 with DPS Staff during the stipulation phase prior to submission of the Application to insure requirements are met in the Certificate Application. Exhibit 14 will include a description of categories for breakdown of cost components. Exhibit 18 will include discussion on access controls, setbacks, lighting and aircraft safety, and preliminary community safety response plan components and emergency first-responder notifications. Exhibit 29 will include performance criteria for site restoration, hazards removal, and guaranty/security agreements between the landowners, municipalities and other entities. Lighthouse Wind is in the process of consulting with municipalities and other agencies regarding local legal provisions applicable to the proposed facilities. Exhibit 31 will include lists of all local legal provisions applicable to the Project. Exhibit 34 will provide the location of electrical interconnection facilities and analysis of impacts.</p> <p>Section 1.2 of the PSS assumed that Exhibits 38, 39, and 40 will not be applicable to the Project. However, Lighthouse Wind recognizes that these may be applicable based on Project layout and design of facilities and will include these Exhibits as applicable. Lighthouse Wind will discuss the requirements of these Exhibits, as applicable, with DPS Staff during the stipulation phase prior to submission of the Application.</p>
102	Behnke, H. (DPS)	102.142	<p>Commenter states that the PSS does not include a discussion regarding the requirements of 16 NYCRR 1001.8 – Exhibit 8, Electric System Production Modeling. Commenter recommends that Lighthouse Wind initiate consultation and that the Revised Scoping Statement include a proposed input data set for review.</p>	<p>Lighthouse Wind will consult with DPS Staff regarding the input data set and modeling information to be contained in this Exhibit. This information will be provided in the Certificate Application.</p>
102	Behnke, H. (DPS)	102.143	<p>Commenter states that the PSS does not include a section regarding requirements of 16 NYCRR §1001.11 Preliminary Design Drawings.</p>	<p>Preliminary design drawings will be provided in Exhibit 11 of the Certificate Application. The content of the preliminary design drawings necessary to satisfy the requirements of Exhibit 11 will be discussed with DPS Staff during the stipulation phase prior to submission of the Application.</p>
102	Behnke, H. (DPS)	102.144	<p>Commenter indicates that on page 2 of the PSS, the section regarding Preliminary Design Drawings is included under the list of “exhibits which do not require scoping.” The Revised Scoping Statement should indicate the format to be used for creating design drawings (i.e., AutoCAD or other).</p>	<p>It is currently anticipated that AutoCAD and ArcMap will be used to create design drawings.</p>
102	Behnke, H. (DPS)	102.145	<p>Commenter requests that Lighthouse Wind note the scale to be used for the submitted site plan figure in the Revised Scoping Statement.</p>	<p>Any preliminary design drawings or site plan figures included within the Certificate Application will include the relevant scale.</p>
102	Behnke, H. (DPS)	102.146	<p>Commenter notes that §1001.11 (a) through (h) require plan and design information regarding proposed facilities, including interconnections. Commenter recommends that the Revised Scoping Statement include a list of components for the point-of- interconnection drawing details such as any new breakers, bus arrangements, and transformers; and a description of the changes to the Somerset yard that will have to be made to complete interconnection of the Project to the Somerset yard.</p>	<p>This information is not yet available due to the ongoing nature of the NYISO interconnection process. More information will be available upon completion of the System Reliability Impact Study (SRIS). This information will be provided in the Certificate Application.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.147	Commenter requests that if an on-site concrete batch plant is planned, Lighthouse Wind provide a preliminary sketch plan or typical layout showing all components of this feature and its approximate location. If an on-site plant will not be utilized, then provide information for the plant to be used. Include the distance from the Project area, and an estimate of the number of concrete mixing transport trucks required per day during foundation pouring activities.	This information will be provided in the Certificate Application.
102	Behnke, H. (DPS)	102.148	Commenter suggests that the Application show construction entrance and exit ways for any proposed laydown/staging yard location plans, on-site concrete batch plant, and O&M facility.	This information will be provided in the Certificate Application.
102	Behnke, H. (DPS)	102.149	Commenter requests per Section 1001.11 (f) Architectural Drawings of the Article 10 Regulations that Lighthouse Wind provide foundation types in the Application to be used for wind turbines and the O&M building. Commenter also requests Lighthouse Wind to provide typical preliminary foundation details exhibiting all proposed foundation types.	This information will be provided in the Certificate Application.
102	Behnke, H. (DPS)	102.150	Commenter requests per Section 1001.11 (g) Typical Design Drawings of Underground Facilities of the Article 10 Regulations that- the Application include typical profiles (including depth, width, cable & conduit diameter, separation, etc.) of all configurations of underground cable installations (direct buried, duct banks, etc.) along undisturbed land, local, county, and state roads. Commenter also requests, if applicable, that Lighthouse Wind include compact bundled sections that are typically used along local narrow roads. Additionally, Commenter requests Lighthouse Wind to provide typical plan and profile drawings for any cable splice vaults and handholes/manholes (include the approximate number of required splice vaults and manholes per mile, etc.).	This information will be provided in the Certificate Application.
102	Behnke, H. (DPS)	102.151	Section 1001.11 (g) - Typical Design Drawings of Underground Facilities Commenter requests that if overhead cables will be installed, describe the structures to be used and installation methods. Commenter also asks that Lighthouse Wind provide typical elevations for these overhead structures in the application.	It is not currently anticipated that the Project will use overhead transmission. However, if that should become necessary, a description of these facilities would be included in the Certificate Application.
102	Behnke, H. (DPS)	102.152	Section 1001.12 (c) - Avoiding Interference with Existing Utility Systems Commenter requests that Lighthouse Wind provide in the Certificate Application, typical separations of proposed facilities from existing utilities and infrastructure and measures to minimize interferences where avoidances cannot be reasonably achieved. Commenter also requests that Lighthouse Wind provide typical distances that Lighthouse Wind has applied to other similar projects and provide references to any specific codes and regulations regarding clearances.	This information will be provided in the Certificate Application.
102	Behnke, H. (DPS)	102.154	In the application, provide the following: the decommissioning cost in current dollars, the method and schedule for updating the cost of decommissioning and restoration, the method of ensuring that funds will be available for decommissioning and restoration, and the method in which the Project will be decommissioned and the site restored. (per Section 1001.29, Exhibit 29 - Site Restoration and Decommissioning)	The requested information will be included in Exhibit 29 of the Certificate Application.
110	Isselhard, A.	110.13	Commenter states that the PSS does not include information on decommissioning, stating it is highly likely that the Project will be sold to a new owner, probably before construction is completed, and may be sold several times over the years. Additionally, commenter notes that infrastructure will need to be removed and land restored when the turbines are no longer productive. Commenter states that plans need to be in place and that a cash amount should be held in trust by the Towns to cover the cost of decommissioning, and a clear definition of when the Project is no longer productive and should be decommissioned.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. As stated in Section 1.2 of the PSS, Exhibit 29 Site Restoration and Decommissioning is not an Exhibit that requires scoping (inclusion in the PSS). Exhibit 29 of the Certificate Application will include a plan for decommissioning and restoration of the site, including a description of how it will be funded and guaranteed.
DMM68	Titus, D.	DMM68.2	Commenter states "the agricultural "preservation" is also a joke, as 600-ft wind turbines require bases dug, I am told, 3 to 4 stories down into the ground, but ultimate remediation when decommissioned, goes down only 4 feet. So we are left, then, with industrial waste hidden underground."	Lighthouse Wind will work to ensure all affected leased lands are restored to the satisfaction of the landowners and the applicable local/state/federal agencies. All site restoration methods within agricultural areas will abide by the guidelines of the New York State Department of Agriculture and Markets - ( <a href="http://www.agriculture.ny.gov/ap/agsservices/Wind_Farm_Guidelines.pdf">http://www.agriculture.ny.gov/ap/agsservices/Wind_Farm_Guidelines.pdf</a> ).  Per the guidelines, a monitoring and remediation period of two years immediately following the completion of any decommissioning and restoration activities will be provided. The two year period allows for the effects of climatic cycles such as frost action, precipitation and growing seasons to occur from which various monitoring determinations can be made. Any remaining agricultural impacts can be identified during this period and follow-up restoration efforts will be implemented. The decommissioning process will be further detailed within Exhibit 29 of the Certificate Application.
DMM75	Ray, M.	DMM75.2	Commenter has concern that turbines will be inoperable and unsightly 15 to 20 years down the road, comparing project to the coal-fired generating plant that the commenter states now sits inoperable and unsightly in the area.	Exhibit 29 of the Certificate Application will include a plan for decommissioning and restoration of the Project site, including a description of how it will be funded and guaranteed.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM98	Nellist, G.	DMM98.1	Commenter is opposed to wind farm in Town of Yates and Somerset. Ask why they would want beautiful farm land ruined by something that won't ever be removed. After 20 years of low energy output, they become worthless to the area and will be passed on to future generations to deal with.	Exhibit 29 of the Certificate Application will include a plan for decommissioning and restoration of the site, including a description of how it will be funded and guaranteed.
DMM120	De Marco, J.	DMM120.4	Commenter is concerned about responsibility for decommissioning costs	Exhibit 29 of the Certificate Application will include a plan for decommissioning and restoration of the Project site, including a description of how it will be funded and guaranteed.
<b>General Comments and Comments on PSS Purpose/Content of Application (PSS Section 1.1 and 1.2)</b>				
4	Arlington, T.	4.3	Commenter expresses opinion that the turbines are unsightly and huge, and will be seen for miles.	Potential visual impacts due to the construction and operation of the Project will be assessed in Exhibit 24 of the Certificate Application.
14	Mullane, P.	14.3	Commenter believes the Project would have negative impacts on health of residents.	As described in Section 2.3 of the PSS, the scope for the assessment to evaluate the potential for impacts to public health is presented and a more complete assessment will be included as part of Exhibit 15 of the Certificate Application.
25	Hoffman, J.	25.1	Commenter believes the PSS is not compliant with Article 10, lacking significant detail and is rife with generalities, assumptions, and partial information. Commenter believes the PSS should be rejected.	The PSS document is a scoping tool meant to establish methodology, scope of studies, or program of studies to be conducted in support of a Certificate Application, and therefore does not provide an environmental impact analysis of the Project. The Certificate Application will include a detailed environmental impact analysis.
31	Mulholland, V.	31.13	Commenter makes generalized comments regarding risks to migratory birds, taxpayer impacts if turbines are shut down by the government after operation begins, and visual impacts to the community. Commenter provides several questions: If this worst case scenario occurs and this migratory route is destroyed, the Osprey and American Bald Eagle are killed off in Yates County – then what? If the government steps in and shuts the Turbines down, and I argue they will because they will have to, what will happen to all of the dead rusting turbines? Who will pay the untold millions to remove the behemoths and return the ecosystem to its original state? Who will pay to repopulate the American Bald eagle and other species? Is it justifiable to take such a catastrophic risk to potentially gain some “green or renewable energy”? How can they justify the slaughter of hundreds or thousands of birds that contribute to the exact ecosystem they are presumably trying to save?	The Certificate Application will include an assessment of potential impacts to environmental resources, including wildlife (Exhibit 22 and 23) and a discussion on decommissioning at the end of the Project life (Exhibit 29). Additionally, study results will be used by USFWS and NYSDEC to evaluate potential effects of the Project and make informed decisions to minimize or mitigate anticipated impacts on species such as the Bald Eagle. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
37	Crafts, C.	37.5	Commenter notes that the area is not a wasteland and expresses belief that it will become one. Commenter believes that the reason for the Project is political expediency and a desire to harvest a subsidy in a time of rapidly changing energy conditions.	The studies carried out and submitted in the Certificate Application will address the potential impacts to wildlife, land and many other concerns.
37	Crafts, C.	37.7	Commenter notes that residents in Medina, in Ridgeway and Shelby do not seem to be too concerned about project, but under the NYS Article 10 process, they might be more concerned if the Project extends to their areas as well.	As indicated in the PSS, the Project site does not include the Village of Medina or the Towns of Ridgeway and Shelby. Although not anticipated at this time, if the Project were to extend into these areas, residents and applicable stakeholders would be included in the Article 10 process. In regards to assessment of visual impacts on these areas, an information request was sent to the Towns of Shelby and Ridgeway asking for assistance in identifying visually sensitive resources within their communities.
37	Crafts, C.	37.11	Commenter asks if anyone statewide and/or nationally is aware of what would be traded away to build the Project, discussing the environmental setting of the area as having four seasons, with no significant natural disasters. Commenter notes that the Lake Ontario water level is controlled by the Canadian power plant on the St. Lawrence. Commenter expresses that the future is uncertain and believes that the area is an important resource that should be maintained as it is.	The PSS has been developed in consultation with relevant local, state, and federal agencies. Project purpose, benefits, and need are established in Section 1.5 of the PSS. The Certificate Application will address potential impacts to environmental resources.
37	Crafts, C.	37.12	Commenter notes that some of the local concerns include siting issues relating to destruction of wildlife, and protection from noise at also concerns on a national level, citing the October 2014 Wind Energy Program Peer Review Report. Commenter requests USDOE experts outside of New York State review the Project as part of the PSS Article 10 process.	The studies carried out and submitted as part of the Certificate Application will address the impacts to wildlife, noise and many other concerns. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
38	Carter, D. (NYS PRHP)	38.6	The agency also asks to remain on the list of interested parties and to receive all further communications regarding this matter.	Lighthouse Wind will include the NYS OPRHP to the stakeholder list for further communications.
41	Punch, J. (on behalf of Town of Somerset)	41.1	Commenter expresses that a number of statements made in the PSS are asserted as factual, but poorly supported by the existing research literature and international standards and guidelines, and draws conclusions that lack support of the larger scientific community; therefore appear to be either erroneous or designed to mislead.	It was not the intent of Lighthouse Wind to mislead or provide erroneous information in the PSS.
49	Wolanyk, E.	49.1	Commenter does not believe that Lighthouse Wind provided enough information specific to the actual proposed Project for the siting board to properly evaluate the planned industrial wind turbine project.	The PSS document is a scoping tool meant to establish methodology, scope of studies, or program of studies to be conducted in support of a Certificate Application. Lighthouse Wind believes it has provided the type of information that is required during the PSS stage of the Article 10 process. The Certificate Application will provide more details and specifics in regards to Project layout and potential environmental impacts for evaluation of the Project.

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54	Boal, J.	54.1	The commenter expresses his fears that the Project will impact public health, property values, the "tranquil and peaceful" community, wildlife populations, tourism, and population within the community contributing to the tax base. The commenter believes Lighthouse Wind is manipulating the system and claims the Project is about financial gain instead of green energy. The commenter references three surveys completed in the area to show majority of the community is opposed to the Project and declares that the majority have a right to be listened to instead of political agendas.	This comment does not specifically speak to a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will provide more details and specifics in regards to potential environmental impacts. Additional public comment period is provided during the Application Phase of the process and public opinion is taken into account in the Certificate decision.
55	Pierce, H.L.	55.1	The commenter expresses his disappointment in the positioning taken by his elected officials prior to all pertaining studies being completed by Lighthouse Wind and others. He expresses that SOS, while being very organized, also has put out half-truths and urges his elected officials to visit the Lighthouse Wind office to study the wall boards pertaining to the Project. The commenter concludes by urging residents to become involved; read the PSS, ask questions, and make comments to the NYS PSC,	This comment does not specifically speak to a portion of the PSS, but appears to be a general support expressed on the proposed Project. Lighthouse Wind would also like to reiterate that the Certificate Application will include a robust assessment of potential environmental impacts and welcomes community comments regarding the Project.
57	Gardner, J. and J.	57.1	In regards to Environmental Compatibility, commenter believes it is a proven fact this type of project is not environmentally compatible, especially in a residential area along the lakeshore. In regards to Public Need, commenter states the area already has all the electricity needed, including underutilized facilities. Commenter suggests NYS should invest in converting the existing coal plant over to natural gas, not financing a highly opposed wind project.	Lighthouse Wind anticipates that the Project will not only be environmentally compatible but believes it is environmentally responsible; the Project represents an abundant source of clean energy and would help to stem greenhouse gas emissions and carbon emissions attributed with the burning of fossil fuels such as coal and natural gas. As has been stated in the EPA's Clean Power Plan, "With abundant clean energy solutions available, and building on the leadership of states and local governments, we can make continued progress in reducing power plant pollution to improve public health and the environment while supplying the reliable, affordable power needed for economic growth. By doing so, we will continue to drive American leadership in clean energy technologies" (Executive Office of the President, 2013).
57	Gardner, J. and J.	57.2	Commenter discusses New York State's "Reforming the Energy Vision" idea (REV) and financial cost to taxpayers. They also state quality of life would be ruined and is not being taken into consideration. The commenter then discusses specific points from the REV goals: 1. Locally produced energy- Lighthouse Wind doesn't meet the criteria, electricity will be sent across the state. 2. Clean Energy to financially benefit everyone - only benefits leaseholders and Apex. Apex Clean Energy is only a name, there is nothing clean about it and most leaseholders already are receiving farm subsidies. 3. More affordable to all WNY residents - proven fact areas with industrial wind farms pay more for electricity. Remember NYS is giving away free money that we the tax payers finance. 4. Protecting NY natural resources - the Lighthouse Wind project sure contradicts this goal! 5. REV putting customers first - no, REV makes NYS look like rock stars while the customers pay the bill.	The commenter addresses multiple portions of the PSS and Certificate Application including Exhibit 8, Electric System Production Modeling, Exhibit 22, Terrestrial Ecology and Wetlands, and Exhibit 23 Water Resource and Aquatic Ecology.  The REV proceedings are ongoing and will be discussed in the Certificate Application.
58	Simon, D.	58.1	Commenter remarks that New York State taxpayers would be financing Lighthouse Wind in their federal tax bills (through the Wind Production Tax Credits given to Lighthouse Wind), then again in their high local utility bills.	In 2015, Congress passed legislation that will phase out the Production Tax Credit over 5 years. After this phase out period, new wind projects will no longer benefit from the PTC. All domestic energy sources have historically been subsidized, partly to help encourage the production of energy domestically. Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYS PSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in the Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
58	Simon, D.	58.2	Commenter states that wind energy is extremely inefficient and costly (three and four times as much as that generated from existing coal and nuclear power plants). Commenter notes that an existing coal powered plant in the town is only run half the time, and a hydroelectric power plant is located less than 40 miles away in Niagara Falls. Commenter states that 600' high turbines in the rural farming community are not needed, and the Project makes no fiscal sense.	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYS PSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
61	Liuzzi, N.	61.1	Commenter expresses general concerns regarding destroying wildlife habitat, endangering migratory birds, and killing bats.	Exhibit 22 of the Certificate Application will include an assessment of potential impacts to wildlife. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
61	Liuzzi, N.	61.3	Commenter expresses general concern regarding impacts on views from Golden Hill State Park and observational activities of birding groups, campers, and stargazers.	As indicated in the PSS, Golden Hill State Park will be included in the Visual Impact Assessment to be completed and included as part of the Certificate Application.
62	Liuzzi, R. M.	62.1	Commenter states the shoreline of Lake Ontario is host to a myriad of wildlife because of its unique geography and is located on a major migratory bird flyway. Commenter notes that thousands of migratory waterfowl appear in the lake during the winter months and that New York State has a DEC program that is attempting to bring back the Bald Eagle, which residents see more often now. Commenter also notes there are migratory songbirds, in such great numbers that birders come to Golden Hill State Park to observe and quantify many different species. Commenter also notes that Pheasants are released by the DEC in the park where, in late fall, sportsmen hunt.	As indicated in the PSS, migratory raptors and songbirds will be included in the proposed scopes of study and included in the Certificate Application. Potential impacts to Golden Hill State Park and any of the local activities that take place at the Park will also be assessed in the Certificate Application.

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62	Liuzzi, R. M.	62.2	Commenter expresses general concern regarding displacement of wildlife, the fragmentation of habitat, the collisions of birds into turbines, and constant blinking lights.	This comment does not specifically address a portion of the PSS but, appears to be a general opinion expressed on the proposed Project. The Certificate Application will provide more details and specifics in regards to potential environmental impacts, including wildlife in Exhibit 22 and visual impacts in Exhibit 24. An additional public comment period is provided during the Application phase of the process and public opinion is taken into account in the Certificate decision.
63	Beitelshees, C.P. and J.H.	63.1	Commenter states the shoreline of Lake Ontario is host to a myriad of wildlife because of its unique geography and is located on a major migratory bird flyway. Commenter notes that thousands of migratory waterfowl appear in the lake during the winter months and that New York State has a DEC program that is attempting to bring back the Bald Eagle, which residents see more often now. Commenter also notes there are migratory songbirds, in such great numbers that birders come to Golden Hill State Park to observe and quantify many different species.	As indicated in the PSS, migratory raptors and songbirds will be included in the proposed scopes of study and included in the Certificate Application. Potential impacts to Golden Hill State Park and any of the local activities that take place at the Park will also be assessed in the Certificate Application.
65	Pierce, H.L.	65.1	Commenter expresses general support for the Project.	Comment noted.
66	Mullane, P.	66.2	Commenter expresses general concerns regarding bird and bat mortality.	The Certificate Application will provide more detailed information in regards to potential environmental impacts, including wildlife in Exhibit 22. An additional public comment period is provided during the Application phase of the Article 10 process and public opinion is taken into account in the Certificate decision.
66	Mullane, P.	66.3	Commenter is concerned about negative effects on the Niagara Falls Air Reserve Station and its 3200 employees.	Lighthouse Wind recognizes the importance of the NFARS to the regional community and economy, and will evaluate other similar operating wind projects within military installations as part of the Socioeconomic Assessment to be included in Exhibit 27 and Effect on Transportation in Exhibit 25 of the Certificate Application. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The DOD has a systematic process for reviewing project information, which is defined in Part 211 of Title 32 of the Code of Federal Regulations ( <a href="http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5">http://www.ecfr.gov/cgi-bin/text-idx?SID&amp;node=pt32.2.211&amp;rgn=div5</a> ). Additionally, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing.
67	Fisher, M.L.	67.1	Commenter expresses general concerns regarding property value, visual and noise impacts. The commenter notes "Independent studies show an average plunge in property values up to -26% when the turbine is from 1000 to 2100 feet away, and -25% diminished when the property lies within 1.8 miles of these huge steel structures. West and to lose 25% of the value of our homes, and yet our school, county, and state taxes will not decrease. Oh, yes, we may receive up to a 10% discount on our town taxes. This is certainly a net loss for our area. When construction begins there is also documented 15 to 25% loss of property value due to the clearing, blasting, and digging, and the truck traffic involved in servicing turbines on new access roads that will traverse the area.	The Certificate Application will include an assessment of property values based on data from existing wind farms and a comprehensive literature review. The Certificate Application will also include an assessment of potential visual and noise impacts. Lighthouse Wind would like to note that operation and maintenance will not generate a significant volume of traffic or involve oversize or overweight vehicles on a regular basis.
68	Bane-Dinse, K.	68.1	Commenter states that wind energy does little to reduce CO2 emissions [Energy Collective Sept 2011].	Lighthouse Wind respectfully disagrees. An AWEA white paper "The Clean Air Benefits of Wind Energy," indicates that the 167.7 million megawatt-hours (MWh) of wind energy produced in the U.S. in 2013 reduced CO2 emissions by 126.8 million tons, the equivalent of reducing power sector emissions by more than 5 percent, or taking 20 million cars off the road.  Mr. Willem Post's "Wind Energy Does Little to Reduce CO2 Emissions" on The Energy Collective website should be considered in light of the various questionable sources, including Wikipedia and a Bentek report (natural gas) that he utilizes. There are various robust studies from which more accurate conclusions can be drawn in regard to the expansion of wind power, including a Stanford Jacobsen Report. Post acknowledges global warming is a "given... reductions would not affect global warming/climate change, unless ALL other nations would do the same, which is highly unlikely." The latter piece was written three months before the United Nations Conference on Climate Change.  Wind energy, one of the cleanest forms of energy, is critical to tackling the 21st century's greatest challenges of combating climate change and reducing carbon emissions. This "home grown" power pays back any carbon used in startup within a few months. Adding wind power to America's energy mix diversifies the nations' energy portfolio, diminishing our reliance on fossil fuels.  This will be further addressed in the Certificate Application.

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68	Bane-Dinse, K.	68.2	Commenter states that rare earth element neodymium is strip mined and 700 lbs. is needed for each turbine	A specific turbine model and/or manufacturer has not yet been selected for the Project. Turbine specifications will be provided within the Certificate Application. It is speculative to say that the turbines to be selected for the Project would require neodymium. Some manufacturers of direct drive turbines, including Enercon, a German-based company, do not use neodymium; the design of its direct-drive turbines are instead based on magnetic fields brought about electrically, so that permanent magnets are not needed.
68	Bane-Dinse, K.	68.3	Commenter states that road building to turbine sites leads to deforestation and blasting.	Siting of temporary and permanent access roads will be conducted to minimize necessary clearing of trees. Additionally, access road construction typically does not require blasting of subsurface bedrock.
68	Bane-Dinse, K.	68.4	Commenter states that industrial wind turbines generate a small fraction of their installed capacity. Despite that, wind promoters describe the wind contribution in terms of installed capacity. Commenter believes this is not accurate and that the variable and intermittent nature of wind makes it impossible for turbines to operate at their rated capacity. Commenter states turbines average only 20% to 30% of rated capacity in the east and they use electricity off the grid.	No form of power generation is 100% efficient. Article 10 §1001.6 Exhibit 6 requires "Wind meteorological analysis demonstrating adequate wind conditions supporting the estimated capacity factor for the facility", thus you will find this information in the Certificate Application.
68	Bane-Dinse, K.	68.6	Commenter notes that no wind turbine project has ever led to the decommissioning of any coal plant.	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYS PSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
68	Bane-Dinse, K.	68.7	Commenter remarks that Denmark is just dependent enough on wind power that when the wind is not blowing right they must import electricity. Commenter states the Danish electric bills are high because of the subsidies that support the private companies building the wind towers and Danish electricity costs for the consumer are the highest in Europe.	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYS PSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.  While this question is not related to the PSS, we want to provide responses to all of our stakeholders to correct misperceptions and diminish concerns. Apex Clean Energy and Lighthouse Wind are focused on accelerating the transition to a world powered by clean energy, and specifically in New York, to help meet the goal of generating half of the state's electricity from clean energy by 2030.
69	Orleans County Legislature	69.1	Resolution No. 458-1215. Resolution states opposition to the Project and the Article 10 law.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion about the Article 10 law.
70	Bane-Dinse, K.	70.1	Commenter expresses general opposition to the Project.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project.
75	Herriwen, B. and G.	75.1	Letter remarks that New York State taxpayers would be financing Lighthouse Wind in their federal tax bills (through the Wind Production Tax Credits given to Lighthouse Wind), then again in their high local utility bills.	In 2015, U.S. Congress passed legislation that will phase out the Production Tax Credit over 5 years. After this phase out period, new wind projects will no longer benefit from the PTC. All domestic energy sources have historically been subsidized, partly to help encourage the production of energy domestically. Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYS PSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
75	Herriwen, B. and G.	75.2	Letter states that wind energy is extremely inefficient and costly (three and four times as much as that generated from existing coal and nuclear power plants). Commenter notes that an existing coal powered plant in the town is only run half the time, and a hydroelectric power plant is located less than 40 miles away in Niagara Falls.	In 2015, U.S. Congress passed legislation that will phase out the Production Tax Credit over 5 years. After this phase out period, new wind projects will no longer benefit from the PTC. All domestic energy sources have historically been subsidized, partly to help encourage the production of energy domestically. Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYS PSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
75	Herriwen, B. and G.	75.3	Letter states that a profit of only 10% going towards local taxes is "practically nothing" and the community does not need, nor wants, the Project based on a survey where 65% votes strongly opposed. Letter states wind projects are uneconomical without massive taxpayer handouts and the wind industry would collapse in a free market.	Socioeconomic effects of the Project will be further analyzed and outlined in Exhibit 27 of the Certificate Application.
91	Hawley, S. (Member of NYS Assembly)	91.1	Commenter requests extension of 21 day comment period.	The comment period was extended to January 12, 2016.

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**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.1	Commenter notes that it is necessary for Somerset to reserve its right to provide future comments on the PSS. The PSS as filed omits substantial and necessary information about the Project. The most glaring omission relates to Lighthouse Wind's continuing refusal to divulge the actual location of the proposed wind turbines. In the event Lighthouse Wind provides additional details, the commenter states that Somerset must therefore be allowed further opportunity to comment.	Lighthouse Wind would like to point out that the public comment period on the PSS has expired. The Town is encouraged to review the completed studies and complete Certificate Application during the Public Comment Period during the Application Phase. Lighthouse Wind reminds the Town that a Project layout has not been defined nor has a turbine manufacturer and model been selected to date, which will affect the number and location of turbines for the Project. The intent of the PSS document is not to include an assessment of potential impacts. A full assessment of the potential temporary and permanent impacts to the environment will be presented in the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.2	Commenter states that Lighthouse Wind has land under lease. Even if the exact location of the towers is not known, the location of land actually under lease should be revealed. Lighthouse Wind's failure to do so, despite numerous requests and motion practice, shows a profound disrespect for openness and transparency in this process. The Commenter believes because Lighthouse Wind is unwilling to reveal the location of the industrial wind turbines, the PSS as a whole is premature.	As stated in the PSS, Lighthouse Wind currently has no land holdings and therefore, will secure easements or leases with private landowners to obtain the rights to place all Project components. Lighthouse Wind is in the process of obtaining the necessary land control to identify locations of Project components and a layout and will provide this information as soon as it is available. A statement that Lighthouse Wind has obtained, or can obtain, such deeds, easements, leases, licenses, or other real property rights or privileges as are necessary for all Project facilities, including interconnections for the facility will be made within the Certificate Application, per 1001.13. Lighthouse Wind will demonstrate within the Certificate Application by a list, maps, or other means, lands which are leased or planned to be leased and utilized for the Project. Lighthouse Wind has provided the type of information that is required for a PSS during the Pre-Application phase of the Article 10 process. The buildable area figure provided as Appendix C to this response document is based on a current, preliminary understanding of environmental and regulation constraints is being provided with this comment response document for identification of potential areas where Lighthouse Wind will consider securing easements or leases with private landowners for placement of turbines. Location of other Project components is currently unknown.
95	Vacco, D. (Town of Somerset)	95.3	Commenter states that because the Town of Yates has been unable to convene a full board meeting prior to January 12, 2015, it has been unable to take the official action dictated by the Commission as being requisite to PSS comment.  The commenter states the new government of the Town of Yates has been denied the ability to comment on the PSS and the voters of the Town of Yates, who just recently elected the town supervisor on a write-in basis, have also had their voices silenced. In addition, the commenter states, Somerset and Yates have been denied the opportunity to coordinate their responses and conserve resources. In summary, the commenter believes the current procedural posture of this case seriously prejudices all stakeholders.	Comment noted. These issues were raised prior to the granting of extensions of time to comment on the PSS and before the mentioned motions were decided denying the relief requested by the Commenter.
95	Vacco, D. (Town of Somerset)	95.4	Commenter states Somerset is unable to provide comprehensive comments on the PSS at this time because Lighthouse Wind has elected to actively conceal the number, type, and actual location of industrial wind turbines. The commenter states that as a result and as noted in the Town of Yates comments on the PSS, "it is presently impossible for the Town to assess the specific impact(s)--be it environmental, ecological, cultural, noise, aesthetics, etc." (Filing No. 165)	Lighthouse Wind would like to point out that the comment document submitted by the Town is comprehensive of the entire PSS document. The Town is encouraged to review the completed studies and complete Certificate Application during the Public Comment Period during the Application Phase. Lighthouse Wind reminds the Town that a Project layout has not been defined nor has a turbine manufacturer and model been selected to date, which will affect the number and location of turbines for the Project. The intent of the PSS document is not to include an assessment of potential impacts. A full assessment of the potential temporary and permanent impacts to the environment will be presented in the Certificate Application.
95	Vacco, D. (Town of Somerset)	95.E8.1	Letter from Chris Collis, Member of Congress dated 12/8/2015 to Department of Defense and FAA, citing concern for proximity of the Lighthouse Wind project to NFARS and requesting a thorough study of any potential impacts the Project structures would have on current and future operations at NFARS.	As stated in Section 2.10 of the PSS, Exhibit 25 of the Certificate Application will include a discussion and associated correspondence regarding any potential impacts on military operations and airspace designated by the FAA. As applicable, the Certificate Application will include a statement regarding consultation with the Department of Defense (DOD), in accordance with 16 NYCRR § 1001.25 (f)(1). The results of those studies and discussions will then be used to further address this topic in a Socioeconomic Assessment and will be included as part of Exhibit 27 of the Certificate Application.  With respect to the conclusion that the wind farm project has the potential to lead to the closure of NFARS, it is noted that many operating wind farm projects, in New York and around the U.S. are operated successfully in close relation to existing air force and other military bases. The events leading up to the Base Closure and Realignment Committee to decide to close a base are based on many complicated and varied factors, none of which involve proximity to a wind farm project. Note, the DoD Siting Clearinghouse informed Lighthouse Wind via telephone on February 23, 2016 that the Project presents no impact whatsoever to flight operations at NFARS or training within Military Operations Areas or Military Training Routes associated with the 914th Airlift Wing. Therefore, there is no basis to consider the potential closure of the basis and the economic consequences as it does not relate to the development of the wind project.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E9.2	Commenter expresses that in the Introduction Section, there needs to be a better description of the overall process. Commenter feels this is important as most of the public, organizations and some agencies are unfamiliar with this process. Commenter asks, once the PSS is commented on, who determines and how do they determine what the final "scope" is? Once the "studies" are completed, who can review them and what is the process to comment on them? In the decision making step, how are the conditions, mitigations, requirements established in these studies enforced, and how are the local governments involved in this enforcement?	The Article 10 process is stipulated in the Public Service Law Article 10, which can be reviewed online at the Department of Public Service's website: <a href="http://www.dps.ny.gov/SitingBoard/">http://www.dps.ny.gov/SitingBoard/</a> . The Siting Board website also has a FAQ section where these questions are answered. After the comment period on the PSS, a stipulations process will determine the final scope of studies or any aspect of the PSS. After studies are completed, Lighthouse Wind will submit an Article 10 Application in which another comment period will allow for additional comments on the Application. Hearings will be conducted prior to the Siting Board decision on the Project. The Department of Public Service or the Public Service Commission shall monitor, enforce and administer compliance with any terms and conditions set forth in the Siting Board's order granting a certificate.
95	Vacco, D. (Town of Somerset)	95.E10.1	Exhibit is the Town of Somerset Zoning Map dated February 2005	Exhibit noted.
95	Vacco, D. (Town of Somerset)	95.E11.1	Exhibit is a Google Earth screenshot of aerial imagery at Town of Somerset.	Exhibit noted.
98	Sokolow, A.	98.1	Commenter would like to know whether Lighthouse Wind is complying with the Code of Conduct for Wind Energy Companies.	Lighthouse Wind has consulted the NYS Attorney General's Office in regard to the Code of Conduct which is currently under revision. We understand that in the past, the Attorney General's Office has entered into Code of Conduct Agreements with wind developers in New York. Given the enactment of Article 10 and the preemption over certain aspects of local authority, we understand that some of the concerns which gave rise to the Code of Conduct may no longer be applicable to the wind industry in New York. Apex has successfully developed and permitted projects in many states and it prides itself on ensuring the development process adheres to a high standard of ethical conduct and avoidance of potential conflicts of interest. As part of its continuing PIP consultation, Lighthouse has reached out to the AG's office regarding the status of the Code and potential revisions in light of Article 10. Lighthouse Wind is committed to the standards and operating procedures set forth in the Code of Conduct.  Regardless of the status of the Code of Conduct, Lighthouse Wind has a high internal standard for ethics in development, and it has and will continue to ensure that it avoids conflicts of interest in development of all of its projects. In fact, Lighthouse Wind is already substantively complying with the code by asking in our leasing documents whether any participating landowners are municipal officials and by requiring any lessors to complete a Municipal Officer Disclosure form. If they are conflicted, we expect that they will recuse themselves from any vote on matters involving the Project.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.1	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Commenter notes that segmenting environmental impacts in the "standard" EIS document format (such as separating groundwater, surface water, wetlands, aquatic habitat, etc. instead of looking at the watershed as a whole) interferes with environmental impact analysis and seems to lead almost automatically to a minimization of impacts.	Lighthouse Wind would like to clarify that neither the PSS nor the Certificate Application is an EIS and that Lighthouse Wind intends to follow the regulations under Article 10 for preparation and submission of the Certificate Application.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.2	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: Pre-application procedures (sec. 1000.5(2)) call for descriptions of significant adverse environmental impacts and proposed mitigation. Since there is no standard for deciding which impacts are significant and consequently in need of mitigation, evidence for such findings (i.e. a clear and comprehensive assessment of impacts) must be presented clearly in the PSS.	The PSS is not meant to provide a comprehensive assessment of impacts, but rather a brief discussion, on the basis of reasonably available information on potentially significant adverse environmental and health impacts resulting from the construction and operation of the proposed facility. Lighthouse Wind believes it has provided the type of information that is required during the PSS stage of the Article 10 process. The Certificate Application will provide more details and specifics in regards to potential impacts and proposed mitigation measures.
100	Abraham, G. (on behalf of Save Ontario Shores)	100.A1.3	Hickory Creek Consulting (Karen Schneller-McDonald) attachment: The commenter requests that information be organized in a table approach to better assess adverse impacts and facilitate the evaluation process to decrease the likelihood that some impacts may be overlooked, and includes examples of these proposed tables.  The commenter also notes that the locations of all turbine sites, other construction areas, and roads is necessary for the assessment of site specific conditions and the identification of adverse impacts from this Project on the natural resources of the area.	Lighthouse Wind will consider providing information regarding impacts in tabular format. However, certain aspects of the presentation of information are guided by the Article 10 Application process. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites. Lighthouse Wind has provided a figure presenting potential wind turbine buildable area based on a current, preliminary understanding of environmental and regulation constraints as Appendix C to this response document.
102	Behnke, H. (DPS)	102.1	Department of Public Service Staff (DPS Staff) advises that significant modifications are necessary to address deficiencies, clarify confusing elements, and to fulfill stated activities and objectives of the outreach and engagement responsibilities of Lighthouse Wind's Public Involvement Program (PIP) Plan prior to advancing closer to any final Scope of Studies or engaging in the stipulation process as envisioned by the Article 10 regulations at 16 NYCRR §1000.5. Because the PSS is so general in nature, the following comments are preliminary and will warrant further attention and revision as project planning advances to a point where stipulations regarding a final Scope of Studies may be developed.	It is Lighthouse Wind's belief that the type and breadth of information required by the Article 10 process for the PSS has been provided and that the Certificate Application will provide information relative to answering "deficiencies" and should help to clarify any specific concerns the DPS staff has in regards to the PSS. Lighthouse Wind understands that DPS comments are preliminary in nature and would like to clarify that it will work in consultation with interested parties to advance through the additional Article 10 process.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.2	<p>Terminology used in the PSS is confusing and does not accord with regulatory language used in 16 NYCRR Parts 1000 and 1001, and definitions in 16 NYCRR §1000.2 in particular. The terms "Project site," "Project area," and "Study Area" appear to be used generally interchangeably throughout the PSS and attachments, which is confusing to readers and complicates preparation of comments on the PSS. The following sentence from section 1.4 should be clarified: "Because the exact locations of Project facilities have not yet been determined, this is considered the Study Area, and throughout the PSS is referred to as the Project site." The Project Site should not be considered equivalent to the Study Area. Please note that the term "Study Area" is defined specifically at section 1000.2(ar).</p> <p>The PSS should identify proposed Study Area distances for relevant topic areas and analyses (e.g., approximately 5 miles for Visual Impact Assessment). The term "Project Site" should be defined to include the footprint location of Project facilities, interconnections, and alternative locations. Because no facility footprint has been defined, the site should represent properties within which Project facilities are proposed to be located, either as the proposed facility, or as reasonable alternative locations.</p>	<p>The commenter's concerns will be taken into consideration and the narrative will be refined in the Certificate Application to ensure accordance with the regulatory language of 16 NYCRR Parts 1000 and 1001, and definitions in 16 NYCRR §1000.2. The Project site as used throughout the PSS includes all properties within which Project facilities may be located, either as the proposed facility or as a reasonable alternative location. Project area and Project site were used interchangeably in the PSS document. Lighthouse Wind used the term "Study Area" in the PSS to distinguish the distances for relevant topic areas and analysis. For example, the land use Study Area will be the same as the Project site/area boundary. The visual Study Area is inclusive of the Project site/area and a 10 mile buffer of the proposed turbine sites. Lighthouse Wind recognizes this may have caused confusion and will take into consideration for preparation of the Certificate Application.</p>
102	Behnke, H. (DPS)	102.3	<p>DPS Staff notes that the Project Area as represented in the PSS has been greatly enlarged by over 5500 acres, or approximately 20%, beyond the Project Area previously identified in the PIP Plan submitted in 2014 (see Attachment A to these comments, a map representing the change in Project Area boundary from the October 2014 PIP Plan through the November 2015 PSS). Review of the PSS and all reports on the PIP program status and PIP outreach updates (through the most recent update submitted by Lighthouse Wind on December 18, 2015), indicates that there has been no specific description or mention by Lighthouse Wind of this significant change in Project Area configuration or potential project location from the time that the PIP was submitted. This is a significant deficiency in Lighthouse Wind's PIP implementation in that no specific efforts to notify agencies or municipal stakeholders of the change have been reported. As revised the Project Area now abuts the Village of Lyndonville, is closer to the western side of the Village of Barker, abuts the Town of Hartland and is significantly closer to the large area of wetlands and the (NYSDEC) Hartland Swamp Wildlife Management Area. These changes warrant scrutiny as to potential scope of studies modifications, stakeholder involvement, municipal plans and applicable regulations, and natural and cultural resources evaluations.</p>	<p>Throughout the project development the Project Area has evolved. Accordingly the Project Area as provided in the PIP which was submitted in October 2014 has changed. Lighthouse Wind will update the PIP accordingly.</p>
102	Behnke, H. (DPS)	102.4	<p>Within the limits of the Project Area as currently or previously mapped, the PSS does not indicate either a generic representation of a proposed Project arrangement, a specific Project Layout, or an indication of properties likely to support development of major Project components. With a landscape of little topographic relief, there are no hilltops or ridgelines that would be indicative of locations likely to be designated as wind turbine locations (...) Consequently, reviewers of the PSS document are left to imagine as best they can what a potential project may involve, and how close to residential and other developed areas, such a potential project, may be located.</p> <p>DPS Staff looks forward to future iterations of APEX's Lighthouse Wind Scoping Documents, where preliminary project arrangements should be provided for helping to focus agency, municipal and the reviewing public's attention on an appropriate scope of studies for advancing project planning to a complete Article 10 application.</p>	<p>Lighthouse Wind will provide to DPS staff, site-specific Project layouts or arrangements as they are developed. Note that these layouts will be provided as part of the Certificate Application.</p>
102	Behnke, H. (DPS)	102.5	<p>Many comments on the PSS have been submitted informally through DPS' DMM system under the "Public Comments" tab. DPS Staff fully expects Lighthouse Wind to review and respond to those material comments accordingly, as per its responsibility pursuant to 16 NYCRR §1000.5(g).</p>	<p>Lighthouse Wind has included all public comments submitted under the DPS' DMM system in the comment response, noted with the prefix DMM in the comment ID.</p>
102	Behnke, H. (DPS)	102.6	<p>Indicate in the Revised Scoping Statement the maximum overall height for the turbines under consideration. If a specific turbine model is not selected at the time of the Application submittal, provide the following information for all turbine models under consideration:</p> <ul style="list-style-type: none"> <li>• Make and model type;</li> <li>• Rated capacity;</li> <li>• Blade length;</li> <li>• Hub height;</li> <li>• Blade tip (total height);</li> <li>• Maximum blade tip speed;</li> <li>• Rated wind speed; and</li> <li>• Elevation plan showing the hub height, tip height (total height) of the model.</li> </ul>	<p>Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time of Application.</p>
102	Behnke, H. (DPS)	102.7	<p>DPS Staff advises that maximum or worst case scenarios under consideration should be provided if the above information is not available at the time of the Application submittal.</p>	<p>Lighthouse Wind concurs with the comments and will include the largest model under consideration if one has not been selected at time of Application. Scenarios will be based upon the larger of any models under consideration.</p>

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
102	Behnke, H. (DPS)	102.9	Regarding the Distribution of public notice of the PSS: While Lighthouse Wind served notice on the DPS service list, it is not clear if copies of the notice/summary were served on the stakeholder list. According to the PIP, Lighthouse Wind stated that "Notifications of important upcoming project milestones (PSS, Application, etc.) and opportunities to share feedback will be provided to the public and identified Community and Governmental Stakeholders." In the PSS cover letter dated November 23, 2015, Lighthouse Wind stated that it posted the information on the Project website and Facebook page, but there is no discussion of email, text or direct mail notification. Lighthouse Wind should use direct correspondence for major project milestones such as filing of the PSS.	The PSS provided a list of parties that were served and provided notice of the PSS in compliance with the regulatory requirements, which is also provided as Appendix K to this comment response document. The PIP did not indicate that the PSS or notice would be provided specifically to the stakeholders identified in the PIP as the list of stakeholders identified in the PIP is significant. Unless those stakeholders requested copies of all notices with the Secretary, they were not provided notice of the PSS.
103	Edick, R (NYSDEC)	103.1	An Operations and Maintenance (O&M) Plan for the Project should be developed and include an environmental management component incorporating environmental considerations to be included in the ongoing maintenance of the facility. The plan should also provide for procedures to assess and minimize environmental impacts during major repairs, emergencies, and decommissioning. DEC recommends that opportunities be explored for creation of additional environmental enhancements during the life of the Project beyond those required for restoration and mitigation, through cooperative partnerships with landowners, local governments, educational and conservation organizations.	A draft Operations and Maintenance (O&M) Plan will be included in the Certificate Application.
104	Spitzer, D. (Attorney for Town of Yates)	104.1	The Town notes that the survey it submitted on December 28, 2015 identified several areas of particular concern to Town residents: the potential effects on nearby Niagara Falls Air Reserve Station, the impact on the appearance of the landscape within the town, the potential impact on property values in the town, and the importance of health and wildlife studies.	Comments noted. Lighthouse Wind will work to ensure that these and other concern areas are addressed through proactive public outreach efforts. The questions contained in Commenter's December 28, 2015 letter are addressed under Letter ID 22.
104	Spitzer, D. (Attorney for Town of Yates)	104.2	Town wishes to emphasize the importance that Lighthouse Wind also abide by the Town's goals including (but not limited to): protection of natural resources (such as its Town Park and scenic vistas), promotion of tourism, maintenance of attractive communities as a means to attract new industries, increasing public access to the recreational resources associated with the natural resources of the area, and preserving and enhancing cultural and historical resources.	Lighthouse Wind has received this comment and appreciates the Town's identification of the Town's planning goals. Lighthouse Wind understands the importance of the resources identified in this comment and suggests that the Project, consistent with other wind projects in New York, can be sited in a manner consistent with those goals and visions, and, in fact, can enhance the opportunities to obtain such goals. For example, the comment identifies the importance of preserving and enhancing cultural resources, which may be a possibility as part of project development.
105	Dudley, S.	105.2	Commenter also notes that industrial wind turbines are inefficient short-lived producer of electricity, and as the Robert Moses hydro facility is within 40 miles, the commenter questions why there is a need for an industrial wind facility as well. The commenter notes that some power generating facilities in Buffalo are closing due to reductions in the need for electricity in NY state.	Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
110	Isselhard, A.	110.2	Commenter states that there is no need for Lighthouse Wind in upstate New York, and is in conflict with the primary mission statement of the PSC as it will not provide reliable electric energy, stating it will be intermittent, volatile, low quality, and non-dispatchable at best. Commenter also states that the Project will not comply with the goal to protect the natural environment (citing noise, avian impacts, wildlife displacement, electromagnetic interference, stray voltage, and defacing the landscape) and therefore, a Certificate should not be issued.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Current State and Federal policies have established directives for increased wind power generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in the Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still a need for additional renewable resources to meet the goal.
110	Isselhard, A.	110.17	Commenter believes the Power NY Act of 2011 should be amended to require a wind developer to provide project details in the PSS such as make, model and specifications of the turbine they are planning to use, and the exact locations of all the turbines. The lack of these details, the commenter states, leaves interested parties unable to make meaningful comments about the proposal or propose relevant studies. Commenter believes a PSS should not be submitted until this information is available to the public, stating this impacts those entities that apply for intervenor funding.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion about the Article 10 law. Lighthouse Wind would like to clarify that there is no requirement to provide a Project Layout within the PSS in the Article 10 regulations, as confirmed by the Hearing Examiners in their January 21, 2016 ruling on this issue.
112	Hoffman, J.	112.2	Commenter states there is a long list of other collateral damages by Lighthouse Wind, including that the Project is not need due to the Somerset Power Station operating at less than 30% capacity and the 100 employees there could be in jeopardy.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Discussions regarding the need for the Project will be included in Lighthouse Wind's Certificate Application. Because the purpose of the PSS was to identify the scopes and methodologies of studies to be performed in anticipation of Lighthouse Wind eventually filing an Application, the PSS did not delve into many of the items which it will analyze and discuss in its Application. The Article 10 Application--when filed, will include a discussion of consistency with state energy policy (Exhibit 10), and the need for the Project in the overview section (Exhibit 2). In addition, as indicated in the PSS, the need for large scale renewable energy projects, such as the Lighthouse Wind Project, is well established in State and Federal policy and is incorporated by State Law in the State Energy Plan. This particular location is important to the State meeting its goals for renewable energy development by virtue of the strong wind resource in the Project area.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
112	Hoffman, J.	112.3	Commenter also claims collateral damage includes, but is not limited to, visual pollution, noise, vibration, shadow flicker, ultrasound, killing of birds and bats, loss of forestland and wildlife habitat, destruction of property values, disruption of normal farming operations, increase in electrical rates, controversy among neighbors, groundwater pollution, construction noise and dust, damage to roads and infrastructure, electromagnetic interference with communications, threats to public health and safety, violation of local planning and zoning regulations, predatory leasing arrangements, suspension of home rule, and erosion of property rights. Commenter closes that three independent studies have shown that the community opposes Lighthouse Wind by a 2:1 majority.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind notes that these potential impacts will be addressed in the Certificate Application through the proposed studies discussed in the PSS.
DMM4	Speis, R.	DMM4.1	Commenter questions why specific facts and questions and common and realistic questions have gone unanswered and vague and generic. The commenter questions where the quantifiable evidence and factual information showing benefits outweigh the risks is. He states that there are too many unknowns for the Project to continue.	It is Lighthouse Wind's intention to answer all substantive questions or concerns regarding the Project, including those from local and seasonal residents. Any additional questions left unanswered after this comment period may be asked during additional comment periods allotted within the Article 10 Application process.
DMM6	LaPorte, R.	DMM6.1	Commenter complains of Lighthouse Wind negotiating lease agreements in secret without town official knowledge. Commenter questions why Lighthouse Wind has not signed a code of ethics yet. Commenter asks why the process is so secretive. Commenter asks the PSC to perform unbiased research on the world wide subject of wind turbine issues. Commenter states wind turbines should not be placed in populated areas.	Town officials were notified prior to discussions with prospective landowners. Memorandums of lease are filed with the respective county in which the property is leased. Land leasing of private land is not controlled by Town officials. To address the commenter's concern with public knowledge and involvement of Project approval, the Article 10 process and public involvement and comment process were implemented for specifically to alleviate the commenter's concern. Lighthouse Wind has consulted the NYS Attorney General's Office in regard to the Code of Conduct which is currently under revision. Regardless of the status of the Code of Conduct, Lighthouse Wind has a high internal standard for ethics in development, and it has and will continue to ensure that it avoids conflicts of interest in development of all of its projects. In fact, Lighthouse Wind is already substantively complying with the Code by asking in our leasing documents whether any participating landowners are municipal officials and by requiring any lessors to complete a Municipal Officer Disclosure form. If they are conflicted, Lighthouse Wind expects that they will recuse themselves from any vote on matters involving the Project.
DMM8	Yeates, M. and C.	DMM8.1	The commenter expresses concerns over disturbing the pastoral landscape and peace and serenity available, concerns related to health issues, effect on habitat of white owls and other birds, and impact on the Niagara Falls Airbase.	Lighthouse Wind appreciates the Commenter's concerns and, in addition to the specific responses provided throughout this document, notes that these potential impacts will be addressed throughout the Application through the proposed studies discussed in the PSS.
DMM16	Robey, G. and J.	DMM16.1	Commenter writes to express opposition to the Project, stating the size of the turbines will alter the pastoral landscape. Commenters also state other reasons not to approve the Project include the infrasound the turbines emit, the damage to wildlife, and the interference of the corridor utilized by the air base in Niagara Falls which could result in a base closure and loss of thousands of jobs in Western New York. Commenter notes that they visited the turbines in Wyoming County and found them obnoxious to the landscape and to the ears.	Lighthouse Wind appreciates the Commenter's concerns and, in addition to the specific responses provided throughout this document, notes that these potential impacts will be addressed throughout the Application through the proposed studies discussed in the PSS.
DMM29	Atwater, S.	DMM29.1	Commenter expresses that she has signed a contract for turbines on her farm. She states that she appreciates the time and consideration of all the opinions put forth, whether they are valid or not. She notes that many governmental agencies are involved and she is confident that Lighthouse Wind will follow all the guidelines government agencies have put forward (examples she includes are: making sure that the soil is being replaced as it was before construction, that soil is not contaminated by concrete, that wildlife isn't being negatively impacted, that the Air Force base isn't in jeopardy, that crops will not be ruined, or people's sleep patterns destroyed). She also states that Lighthouse Wind has been honest and forthcoming with information and that to do things correctly, the process is following a plan and timeline for completion.	This comment does not specifically address a portion of the PSS but, appears to be general support expressed on the proposed Project. Lighthouse Wind would like to reiterate that they will follow guidelines and stipulations as determined during this Article 10 process.
DMM30	Ray, P.	DMM30.1	Commenter expresses their opposition to the Project, including negative impacts such as: the landscape and horizon be riddled with giant industrial factories, taxes will increase as property values drop, and the environment- both flora and fauna- will be negatively affected in so many ways. Commenter also states the overwhelming majority of the residents are opposed to the Project based on a survey in summer 2015. Commenter states that residents will leave the town, county, and state and residents that are for the Project are financially invested and are a small minority.	The Certificate Application will include an assessment of potential impacts to these environmental resources. The Article 10 process allows for additional comments during the Application Phase and accounts for public opinion in the determination process.
DMM31	Ray, R.	DMM31.1	Commenter expresses they do not want wind factories in the Town of Somerset, and will not do anything good for the town.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. Lighthouse Wind intends to present both positive and negative impacts in their Certificate Application.
DMM34	Phillips, J.	DMM34.2	The sign Lighthouse Wind designed for proponents to place on their properties says, "Fear Not the Wind." It is not the wind we fear; it is the destruction of friendships, family ties, health, earth, safety, wildlife, farmland, beauty, peace etc. that we "fear" (some things of which we have already experienced for the past year when this Project was finally made known). These signs also ask to support our farms. The people of this community DO support our farms; it is Lighthouse Wind who is NOT supporting our farms by bribing our local farmers to sign over the precious farmland they have worked years to obtain.	It is not the intention of Lighthouse Wind to negatively impact the community or the public and/or natural resources that surround the Project. Lighthouse Wind will address specific concerns including community character, public health & safety, terrestrial and aquatic resources, agriculture and socioeconomic concerns, and visible impacts (amongst many other concerns) within the Certificate Application. As stated in the PSS, the Project is anticipated to enhance existing land uses by increasing productive value of land per acre, and Lighthouse Wind anticipates the Project will coexist with ongoing agricultural uses, which can aid landowners in making these lands more financially sustainable.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM35	LaPorte, A.	DMM35.1	Commenter expresses her opposition to the Project by siting the area is free from most commercial and businesses in order to live in a quiet area. Commenter states allowing Lighthouse Wind to build HUGE turbines to provide electricity for NYC all around our farms and homesteads would be a crime, saying Somerset and Yates would be changed forever. Commenter states people will flee, the large windmills are not needed and the application for Lighthouse Wind must be denied.	The Certificate Application will include an assessment of potential impacts to these environmental resources. The Article 10 process allows for additional comments during the Certificate phase and accounts for public opinion in the determination process.
DMM36	Ray, M.	DMM36.1	Commenter asks the Siting Board and Albany to not decide what is best for the town, stating that land and property has already been sacrificed for an extensive railroad through precious farmland, and the building of a huge, and now defunct, power facility, with power lines throughout the entire western end of New York State. Commenter expresses Albany should understand the tremendous cost for construction of monstrous turbines, profit will not be shown until these monstrosities are defunct, the loss of prime lakefront views, the beauty of the Seaway Trail, and the privacy of individuals trying to protect their own habitat. Commenter asks Article 10 be overridden.	The Article 10 process is designed to afford communities more opportunities to participate in the siting process. Lighthouse Wind is committed to the requirements of Article 10, including involving communities and complying with local laws and regulations to the extent practicable. The Certificate Application will include an assessment of potential impacts to these environmental resources. The Article 10 process allows for additional comments during the Certificate phase and accounts for public opinion in the determination process.
DMM41	Arlington, D.	DMM41.2	Commenter expresses believe that Article 10 process is flawed and needs to be revamped to be a "home rule" instead of "behind closed door" decision process.	The Article 10 process is designed to afford communities more opportunities to participate in the siting process. Lighthouse Wind is committed to the requirements of Article 10, including involving communities and complying with local laws and regulations to the extent practicable.
DMM42	Phillips, J.	DMM42.1	Commenter remarks about the trustworthiness and integrity of the developer, providing a list of reasons why she believes the company cannot be trusted and gravely lacks credibility and, therefore, should not be allowed to proceed with this Project. Commenter states "the effects of this Project reach FAR beyond the health hazards, loss of property value, dangers to wildlife, etc. that continue to be debated. Commenter believes Lighthouse Wind's shrewdness, victimization of vulnerable people, and their selfish, disrespectful greed clearly discredits the claim that the company can be trusted.	Lighthouse Wind respectfully disagrees. Lighthouse Wind has a high internal standard for ethics in development, and it has and will continue to ensure that it avoids conflicts of interest in development of all of its projects.
DMM43	Ray, M.	DMM43.1	Commenter expresses her strong opposition to the Project, claiming it is causing high anxiety, sleepless nights, and family conflicts.	Lighthouse Wind's Public Involvement Plan is designed to encourage participation by stakeholders in the certification and compliance process so that community concerns are heard and recognized.
DMM45	Albright, S.	DMM45.2	Commenter also notes that Lighthouse Wind states it would include stakeholder input, and per Town of Yates Wind Survey, two thirds of the residents oppose Lighthouse Wind. Commenter also states USFWS has stated this area is wrong for a wind project. Commenter remarks that laws should not be discretionary, and as town and county government has said no to the Project, a precedent has already been set.	The Article 10 process is designed to afford communities more opportunities to participate in the siting process. Lighthouse Wind's Public Involvement Plan is designed to encourage participation by stakeholders in the certification and compliance process. The commenter is also misinterpreting USFWS comments regarding the Project. The USFWS has been cooperative in assisting Lighthouse Wind in siting of the Project and has provided comments and recommendations on the Avian and Bat Study Plan and mitigation measures. Though the USFWS has remarked on their concern, they have not made a decision on the potential effect to federal listed threatened and endangered species.
DMM47	Jay, R.N. Jr	DMM47.1	Commenter expresses his opposition to the Project, noting that the area was impacted in the 1950s when the Niagara Power Project condemned and acquired two local farms and demolished historical buildings, and sat for 30 years before another party constructed a power plant there (and condemned more property and demolished more historical buildings). Commenter equates this to what will come with this Project. Commenter also mentioned Article 10 will severely limit their input in the decision making process, is overwhelmingly opposed in Somerset and Yates, and will "offer only a paltry return both in aesthetics and in finances".	The Article 10 process is designed to afford communities more opportunities to participate in the siting process. Lighthouse Wind's Public Involvement Plan is designed to encourage participation by stakeholders in the certification and compliance process.
DMM48	LaPorte, A. ADC	DMM48.1	Commenter complains about Lighthouse Wind mailings trying to push the Project, adding that it is adding to the postman's heavy load and shows a lack of consideration. Commenter states Lighthouse Wind is only interested in financial gain.	Public mailings are an important part of Lighthouse Wind's Public Involvement Plan in order to provide Project information to landowners and stakeholders.
DMM49	Hoffman, J.	DMM49.1	Commenter remarks that the Town of Yates survey shows strong public opposition, paralleling the findings of two other surveys conducted by the Town of Somerset and the Save Ontario Shores Organization (SOS). Commenter states "the residents of our community strongly oppose this Project because of the industrialization it will bring to our quiet rural community. We realize the negatives far outweigh the possible benefits of Lighthouse Wind. We do not want the noise, vibration, visual contamination, flicker, degrading of property values, construction issues, noise and dust, disruption of farming operations, health effects and the increase in electricity rates associated with this Project. Few if any, will benefit at the expense of many."	The Certificate Application will include an assessment of potential positive and negative impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process. Lighthouse Wind would also like to note that the surveys mentioned were conducted prior to the completion of an assessment of all potential impacts which may bias opinions.
DMM50	LaPorte, A.	DMM50.1	Commenter states the PSS is very vague and generic. Commenter states the Project is not consistent with current land use and the turbines will be very visible. Commenter also notes comments by visitors on how quiet and serene the nights are and the lack of city lights.	The purpose of the PSS is to identify studies to be included with the Certificate Application and allow for public and stakeholder input on the scope and methodologies of the studies to be carried out. The Certificate Application will include Project specific information and assessment of potential environmental impacts. Based on preliminary review of local laws and ordinances and as assessment of the land use in the area, Lighthouse Wind believes the Project would be consistent with current land use.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM51	Arnold, D.	DMM51.1	Commenter, a long time property owner and summer resident, expresses his opposition to the Project and requests NYS act in the best interests of the lakefront and non-lakefront property owners. The commenter states that the estimated annual revenue (~\$2 million) to be shared amongst the towns, villages, and schools, in incidental and the impacts on property values and tax revenue reductions is significant and permanent. Commenter also mentions impacts to the environment and wildlife is significant and permanent. Commenter states opposition is high and the DPS needs to ensure that their decision reflects the opinions of the property owners.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM52	Zern, L.	DMM52.1	Commenter expresses her opposition to the Project, state the size and quantity of the windmills will destroy the area and will be seen for miles. She also mentions there will be impacts on the regions birds and wildlife, and states turbines are better in areas where there is no residential impact, noting there are health issues to be considered as well. Commenter states there will be no positive impacts to the region.	This comment does not specifically speak to a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM53	Hellert, C.	DMM53.1	Commenter requests Lighthouse Wind's request for additional time to respond to public questions to be denied, due to the timing of the PSS intentionally being over Thanksgiving and the holiday season.	The timing of the PSS submittal was based upon completion of certain Project planning and availability of information. There was no intention to time this around the holidays. The PSS would have been out earlier except for an error by one of the newspapers in the publication date.
DMM54	Smith, A.	DMM54.1	Commenter expresses her opposition to the Project stating that the area is a major migratory flyway with many types of birds and the construction would displace wildlife, fragment habitat, and cause collisions of birds into turbines, include constant blinking lights, and more environmental impacts.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM55	Boal, J.	DMM55.2	Commenter remarks the PSS contains no specific information, limiting the communities' ability to gather information and prepare thoughtful responses and instead leading to residents turning against each other. Commenter feels anger and frustration should be towards the elected officials who allow this to happen. Commenter is opposed to the Project.	The Certificate Application will include specific information regarding the Project layout and include an assessment of potential impacts to environmental resources. A comment response period during the Article 10 Certificate phase will allow for additional public comments on Project specifics presented in the Application. It is Lighthouse Wind's intent to provide the community with information as it is available, per the existing PIP.
DMM55	Boal, J.	DMM55.3	Commenter feels the turbines are a risk to health, financial well-being and quality of life. Commenter feels Lighthouse Wind should offer to sign contracts with the residents of Yates and Somerset that guarantee turbines don't pose a health risk and will not affect property values.	The Certificate Application will include specific information regarding the Project layout and include an assessment of potential impacts to health, socioeconomics, and quality of life. Any mitigation strategies will also be discussed in the Certificate Application.
DMM57	McClellan, J.	DMM57.1	Commenter expresses their opposition to the Project, stating it will ruin the vista and look like an airport runway with lights flashing during the night. Commenter includes references that oil rigs off the coast of Florida are not allowed and adds their opposition to proposals for turbines on Galloo Island.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM58	Verheyn, R.	DMM58.1	Commenter expresses their opposition to the Project, stating the NYS tourism ads are hypocritical if industrial wind turbines are put this this area of natural beauty. Commenter states turbines are ugly, noting Lighthouse Wind's oversized postcard brochures also don't include turbines in the photos.	Lighthouse Wind can't specifically comment on the NYS tourism ads but, Lighthouse Wind will address concerns on Tourism within Exhibit 27 (Socioeconomic Impacts) of the Certificate Application. Lighthouse Wind has included turbines on some of its mailings and will work to continue to improve the quality of its printed literature in the future.
DMM59	Bronson, C.	DMM59.2	Commenter also mentions Lighthouse Wind has not signed the Code of Ethics to do business in NY state.	Lighthouse Wind has consulted the NYS Attorney General's Office in regard to the Code of Conduct which is currently under revision. An executable Code of Conduct has not yet been issued for Lighthouse Wind to sign.  Regardless of the status of the Code of Conduct, Lighthouse Wind has a high internal standard for ethics in development, and it has and will continue to ensure that it avoids conflicts of interest in development of all of its projects. In fact, Lighthouse Wind is already substantively complying with the Code by asking in our leasing documents whether any participating landowners are municipal officials and by requiring any lessors to complete a Municipal Officer Disclosure form. If they are conflicted, Lighthouse Wind expects that they will recuse themselves from any vote on matters involving the Project.
DMM62	LaPorte, A.	DMM62.1	Commenter expresses that what was once a very friendly town of Somerset has been pitted against each other by this Project. Commenter suggests the town will become a ghost town if the turbines are built, as they will be very visible and elderly residents will move and spend retirement money elsewhere.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources, including socioeconomic effects.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM64	Boal, J.	DMM64.2	Commenter also states belief that Lighthouse Wind's only motivation is financial, that the government is siding with big business, and mentions loss of property value.	Current State and Federal policies have established directives for increased renewable energy generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.  In regard to property values, the PSS, in section 2.12.2.2 states: While public perceptions seem to indicate that the presence of wind turbines diminish property values, numerous property value studies based on statistical analysis of real estate transactions have found that wind facilities have no significant impact on property values (Sterzinger et al., 2003; Hoen, 2006; Hoen et al., 2009; Hinman, 2010; Carter, 2011). These studies will be summarized and discussed in Exhibit 27 of the Certificate Application.
DMM65	Hayden, E.	DMM65.1	Comment states the State Park must be protected, tourism is important and should be considered, and animals and birds will be affected by noise and changes in wind patterns.	The Certificate Application will include an assessment of potential impacts to environmental resources, including Golden Hill State Park, socioeconomic effects, and effects on wildlife. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM70	Bird, J.	DMM70.1	Commenter is opposed to the Project generally citing impacts to Mercy Flight, the Niagara Falls Air Reserve Station, shadow flicker, noise, and concrete foundations.	Comments noted. The Certificate Application will include an assessment of potential impacts to environmental resources, including potential impacts to Mercy Flight, NFARS, shadow flicker, noise, and soils.
DMM75	Ray, M.	DMM75.1	Commenter states they are opposed to Project because of general noise concerns, visibility concerns, and the placement of the turbines potentially impacting the lifestyle and personal security of being surrounded by the open fields, fresh produce, and potential climate effects.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM77	Doughty, M.	DMM77.1	Commenter expresses opposition to construction of wind farms as they indicate it would destroy the beautiful environment and community in Somerset and Yates. The construction of these wind farms will negatively affect the wild life, farming, people and peacefulness of the community. The potential locations are too close to real cities and communities that will have only negative effects should this proposal move forward.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM77	Doughty, M.	DMM77.2	Wind Turbines are an outdated technology that will soon be surpassed by other, more efficient and less intrusive renewable energy sources. (Wind Farms) are on their way to being a no-longer-used eye sore. This (the Project) is not a sustainable solution; it is a plan for a corporation to profit while destroying land and communities.	The intentions of the Project are to create a wind-powered electrical generating facility that will provide a significant source of renewable energy to New York State. As stated in the PSS, the Lighthouse Wind Project is compatible with the objectives of the State Energy Plan, as according to the Plan, "Renewable Energy sources, such as wind, will play a vital role in reducing electricity price volatility and curbing carbon emissions." Lighthouse Wind will provide further information on the benefits of the Project as well as information on Alternatives within the Article 10 Application.
DMM78	Ray, M.	DMM78.1	Commenter concerned about wind turbine development impacting the beautiful lakeshore, fertile lake plains, and nature (birds, wildlife, fauna, spacious skies, fresh air).	The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM85	Brounscheidel, R.	DMM85.1	Commenter provides support for the Project and indicates he thinks the benefits of the Project (as evidenced from countries utilizing more and more renewables such as Germany and carbon footprint dropping) outweigh the costs.	Comment noted.
DMM86	Bansbach, J.	DMM86.1	Commenter indicates that he finds the flyers Lighthouse Wind distributed in Yates and Somerset very misleading as the photograph on the rear showed a tower (and some barely visible in the distance) with nothing else in the photograph to reference the size and height of the turbines. He had visited a wind farm in Sheldon recently and noted how they dominated the landscape, towering above homes, farms, and hills. Commenter can't imagine what it would be like with even taller turbines in the Towns of Yates and Somerset.	Visual simulations will be presented in the Certificate Application under Exhibit 24. These simulations will use photographs taken from representative viewpoint locations to simulate the appearance of the wind turbines in the Project setting.
DMM89	Dudley, M.	DMM89.1	Commenter asks PSC to reject the Project and links to peer reviewed articles that show the damaging health effects caused by wind turbines.	The Certificate Application will include a comprehensive review of international research in wind turbines and health effects.
DMM90	Suhr, M.	DMM90.1	Commenter indicates they are opposed to wind turbines as they would be detrimental to area and people who live there for serenity, nature, and peacefulness.	Comment noted.
DMM91	Wells, J.	DMM91.1	Commenter indicates support for the Project as it may bring short or long term revenue to the area.	Comment noted.
DMM92	Manning, L.	DMM92.1	Commenter indicates general opposition to the Project. Indicates there are many health consequences.	The Certificate Application will include an assessment of potential impacts to public health.
DMM96	Chatfield, K.	DMM96.1	Commenter indicates general opposition to Project and requests for those that review the Project to look at and research how other towns have fared once a windfarm is built. Commenter also states belief that electrical power generating stations have never closed because of wind turbines, as they are not a reliable source of energy.	Lighthouse Wind believes that the facts support wind energy as a reliable and renewable energy source that can help to curb carbon emissions and the Project is expected to generate enough electricity to meet the average annual consumption of approximately 53,000 households, based on average annual electric consumption 7.2 megawatt hours (MWh) for New York State. The local community would benefit from lease revenues, temporary and/or permanent employment, increased tax revenues, and payments to local businesses.
DMM97	Nellist, A.	DMM97.1	Commenter indicates that they are opposed to Project. Notes that Niagara Falls with its' major generation facility hasn't improved because of the generation facility. Commenter indicates it isn't a beautiful area and doesn't want their area to look similar.	The Robert Moses Niagara Power Plant, as a hydroelectric power station, has a very different visual character than a wind farm. The Certificate Application will include a visual study and assessment of potential impacts, including visual simulations of the area with wind turbines.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM99	Tuk, J.	DMM99.1	Commenter is upset that the scoping area encroaches on the NW corner of the Village of Lyndonville.	The Visual Impact Assessment will include a 10 mile buffer around the Project site, which will likely include the Village of Lyndonville. The Visual Impact Assessment will be included in the Certificate Application
DMM99	Tuk, J.	DMM99.3	Commenter is opposed to the Project and indicates their belief that the financial gain for local governments and landowners is tantamount to bribery.	Comment noted.
DMM103	Smith, A.	DMM103.1	Commenter is opposed to the Project - generally citing impacts to scenery, fields, roads, birds, and health.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM105	Hoffman, J.	DMM105.1	Request for extension of comment period.	The comment period was extended to January 12, 2016.
DMM109	Verhayn, B.	DMM109.1	Commenter is opposed to the Project and impacts to community character.	The Certificate Application will include an assessment of potential impacts to environmental resources, including visual assessment in Exhibit 24 and community character in Exhibit 4.
DMM110	Bronson, C.	DMM110.1	Commenter is concerned about noise and infrasound impacts from the Project.	The Certificate Application will include an assessment of potential impacts to environmental resources, including assessment of noise (Exhibit 19) and infrasound (Exhibit 15 and 19). Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM111	Bansbach, Je.	DMM111.1	Commenter is opposed to the Project and is concerned about impacts to bird species and underground impacts from turbine foundations.	Comment noted. The Certificate Application will include an assessment of potential impacts to these environmental resources in Exhibits 21 and 22. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM112	Hellert, C.	DMM112.1	Commenter claims that Lighthouse Wind is providing form letters for community members to submit to the DPS and believes this is inappropriate during the PIP and PSS phases of the Project.	Lighthouse Wind has provided several methods for stakeholder input throughout the PIP implementation. It is important for all stakeholders, opponents and supporters alike, to have opportunities to voice their opinions regarding the Project, and Lighthouse Wind encourages methods to ensure that their voice is heard in this process.
DMM113	Dudley, S.	DMM113.1	Commenter expresses general opposition to the Project with concerns that include efficiency of wind generation, visual impacts, migratory bird impacts, public health impacts, and property value impacts.	The Certificate Application will include an assessment of potential impacts to environmental resources. It is Lighthouse Wind's intent to answer all substantial questions raised during the PSS comment period. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM114	Campbell, H.	DMM114.1	Commenter expresses support for the Project. States the Project will cut dependence on foreign oil, lessen the carbon footprint, and help the local economy.	Comment noted.
DMM116	Evans, K.	DMM116.1	Commenter is opposed to the Project and has general concerns regarding noise, infrasound, shadow flicker, health impacts, and wildlife impacts.	This comment does not specifically address a portion of the PSS but, appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM117	Campbell, S.	DMM117.1	Commenter expresses general support for the Project.	Comment noted.
DMM118	Kiefer, G.	DMM118.1	Commenter states general opposition to the Project.	Comment noted.
DMM119	Craft, M.	DMM119.1	Commenter is opposed to the Project and has general concerns regarding public health, impacts on birds, air quality, and community character.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM120	De Marco, J.	DMM120.1	Commenter is opposed to the Project and government subsidies for wind power.	Current State and Federal policies have established directives for increased renewable energy generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
DMM121	Leiting, J.	DMM121.1	Commenter expresses general opposition to the Project.	Comment noted.
DMM122	Doughty, R.	DMM122.1	Commenter expresses general opposition to the Project – is concerned about impacts to visual impacts, migratory birds, public health hazards, jobs (Niagara Air Base), and real estate values.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM124	Hellert, C.	DMM124.1	Commenter expresses general opposition to the Project.	Comment noted.
DMM125	Esposito, J. & S.	DMM125.1	Commenters express general opposition to the Project, citing public health, wildlife, agricultural concerns.	Comment noted. This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.

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Summary of Responses to PSS Comments

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Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM127	DeMerle, R.D.	DMM127.2	Commenter is opposed to government subsidies for "Green Energy."	Current State and Federal policies have established directives for increased renewable energy generation due to the effects of climate change. The NYSPSC is charged with reviewing the purpose and need of the Project in relation to the energy needs for all of New York State. The purpose and need of the Project will be presented in Certificate Application. New York State's goal of 50% renewables by 2030 takes into account the existing renewable generation such as the "Niagara Power Project." There is still need for additional renewable resources to meet the goal.
DMM131	Bronson, C.	DMM131.1	Commenter claims that Lighthouse Wind is posting "Harvest the Wind" and "Fear Not the Wind" signs in the community and believes this is inappropriate during the PIP phase of the Project.	Comment noted.
DMM131	Bronson, C.	DMM131.2	Commenter claims that opposing viewpoints are removed from the Lighthouse Wind Facebook page and is concerned that this is inappropriate during the PIP phase of the Project.	Lighthouse Wind established the following protocol for acceptable Facebook content: "It is the policy of Lighthouse Wind to engage in open and honest dialogue about the Project and its impacts and opportunities for the area. We encourage the community to share their opinions but will not allow comments on Facebook that are profane, abusive, or intentionally misleading." For a very brief period while establishing this policy, Facebook commenting was disabled. This issue was fully addressed in a letter submitted to the Public Service Commission, and visible on the docket website on September 24, 2015.
DMM132	Hellert, C.	DMM132.1	Commenter claims Lighthouse Wind has encouraged residents to file form letters, provided vague responses to questions, hosted parties for their leaseholders, printed "Harvest the Wind" signs to be posted in the community. Commenter believes these are inappropriate activities during the PIP phase of the Project.	Lighthouse Wind has provided several methods for stakeholder input throughout the PIP implementation. It is important for all stakeholders, opponents and supporters alike, to have opportunities to voice their opinions regarding the Project, and Lighthouse Wind encourages methods to ensure that their voice is heard in this process.
DMM132	Hellert, C.	DMM132.2	Commenter is concerned Lighthouse Wind has not signed a code of ethics.	Lighthouse Wind has consulted the NYS Attorney General's Office in regard to the Code of Conduct which is currently under revision. Regardless of the status of the Code of Conduct, Lighthouse Wind has a high internal standard for ethics in development, and it has and will continue to ensure that it avoids conflicts of interest in development of all of its projects. In fact, Lighthouse Wind is already substantively complying with the code by asking in our leasing documents whether any participating landowners are municipal officials and by requiring any lessors to complete a Municipal Officer Disclosure form. If they are conflicted, Lighthouse Wind expects that they will recuse themselves from any vote on matters involving the Project.
DMM133	Sayed, M.	DMM133.1	Commenter expresses general opposition to the Project based on danger to birds, proximity to residences, and visual impacts.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM134	Markel, S.	DMM134.1	Commenter expresses general opposition to the Project based on impacts to health and safety of humans and wildlife; disruptions to quality of life; impacts to tourism; and inefficiency of wind energy.	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM134	Markel, S.	DMM134.2	Commenter would like to know if Lighthouse Wind has signed the New York State Business Ethics Agreement.	Lighthouse Wind has consulted the NYS Attorney General's Office in regard to the Code of Conduct which is currently under revision. Regardless of the status of the Code of Conduct, Lighthouse Wind has a high internal standard for ethics in development, and it has and will continue to ensure that it avoids conflicts of interest in development of all of its projects. In fact, Lighthouse Wind is already substantively complying with the Code by asking in our leasing documents whether any participating landowners are municipal officials and by requiring any lessors to complete a Municipal Officer Disclosure form. If they are conflicted, Lighthouse Wind expects that they will recuse themselves from any vote on matters involving the Project.
DMM141	Dudley, S.	DMM141.2	Commenter has general concern about impacts to birds, bats, health issues of infrasound, interference with local radar (air transportation).	This comment does not specifically address a portion of the PSS, but appears to be a general opinion expressed on the proposed Project. The Certificate Application will include an assessment of potential impacts to environmental resources. Any additional questions left unanswered may be asked during additional comment periods allotted within the Article 10 Application process.
DMM142	Howard, S.	DMM142.1	Commenter expresses that a viable green project should efficiently generate needed electricity in a manner that has a positive impact on the health, safety, environment, economy and quality of life in surrounding communities. The commenter expresses that the PSS indicates the proposed turbines would be the tallest used on land in the US, would create significant low frequency noise disturbances to residents, damage roads, water sources and buildings from blasting and construction of deep turbine foundations, be sited in a major bird migratory flyway, and would industrialize quiet, rural communities currently supporting farming, recreation and tourism economies.	Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind anticipates that the Project will not only be environmentally compatible but, believes it is environmentally responsible; the Project represents an abundant source of clean energy and would help to stem greenhouse gas emissions and carbon emissions attributed with the burning of fossil fuels such as coal and natural gas. As has been stated in the EPA's Clean Power Plan, "With abundant clean energy solutions available, and building on the leadership of states and local governments, we can make continued progress in reducing power plant pollution to improve public health and the environment while supplying the reliable, affordable power needed for economic growth. By doing so, we will continue to drive American leadership in clean energy technologies" (Executive Office of the President, 2013). In regards to the comment claims of potential impacts, Lighthouse Wind will assess the potential impacts to these and other environmental resources throughout the Certificate Application.

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
DMM142	Howard, S.	DMM142.2	In regards to the PSS Section 1.5, page 6, the commenter states more detail is needed on the turbines to determine an accurate impact of noise, industrialization, bird & bat mortality, and an accurate net power generation. The commenter also asks under what conditions will turbines need supplemental power, possibly from diesel generators (which have noise and fossil fuel pollutants), when wind speeds are not ideal?	<p>Although this comment was received after the PSS comment deadline, Lighthouse Wind would like to respond to the comments related to the PSS. Lighthouse Wind has not yet selected a turbine manufacturer or model. The Certificate Application will provide turbine specifications and layout, or an evaluation of all potential turbine sites and the largest turbine model under consideration if one has not been selected at the time an Application is submitted. Prior to performing portions of studies and final reports for the Certificate Application, Lighthouse Wind will incorporate an assumed turbine model.</p> <p>Just as any power plant does during times that it is not generating; Turbines will use minimal backfeed power from the grid when wind speeds are not within the operating range. Each turbine has a comprehensive control system that monitors the subsystems within the turbine and the local wind conditions to determine whether the conditions are suitable for operation.</p>
<b>Duplicate Letters (Letters which are exact copies of those submitted by another Commenter, or letters submitted as an exhibit or attachment to a comment letter that were also sent separately by the original author)</b>				
59	Shirback, D.	59.1	Duplicate of <b>Letter ID 58</b>	Please see response to Letter ID 58.
60	Shirback, P.	60.1	Duplicate of <b>Letter ID 58</b>	Please see response to Letter ID 58
72	Herriwen, B. and G.	72.1	Duplicate of <b>Letter ID 61</b>	Please see response to Letter ID 61
73	Herriwen, B. and G.	73.1	Duplicate of <b>Letter ID 67</b>	Please see response to Letter ID 67
74	Herriwen, B. and G.	74.1	Duplicate of <b>Letter ID 68</b>	Please see response to Letter ID 68
77	Herriwen, B. and G.	77.1	Duplicate of <b>Letter ID 71</b>	Please see response to Letter ID 71
78	Dinse, E.	78.1	Duplicate of <b>Letter ID 71</b>	Please see response to Letter ID 71
79	Dinse, I.	79.1	Duplicate of <b>Letter ID 62</b>	Please see response to Letter ID 62
80	Coates, W. and C.	80.1	Duplicate of <b>Letter ID 75</b>	Please see response to Letter ID 75
81	Bane-Dinse, K.	81.1	Duplicate of <b>Letter ID 67</b>	Please see response to Letter ID 67
83	Davis, W. and S.	83.1	Duplicate of <b>Letter ID 67</b>	Please see response to Letter ID 67
84	Coates, W. and C.	84.1	Duplicate of <b>Letter ID 62</b>	Please see response to Letter ID 62
85	Coates, W. and C.	85.1	Duplicate of <b>Letter ID 71</b>	Please see response to Letter ID 71
86	Davis, W. and S.	86.1	Duplicate of <b>Letter ID 75</b>	Please see response to Letter ID 75
87	Coates, W. and C.	87.1	Duplicate of <b>Letter ID 68</b>	Please see response to Letter ID 68
88	Coates, W. and C.	88.1	Duplicate of <b>Letter ID 61</b>	Please see response to Letter ID 61
92	McCormick, J.	92.1	Duplicate of <b>Letter ID 62</b>	Please see response to Letter ID 62
93	McCormick, J.	93.1	Duplicate of <b>Letter ID 67</b>	Please see response to Letter ID 67
95	Vacco, D. (Town of Somerset)	95.67	The commenter expressly incorporates the comments of Tom Staples and Cynthia Heller as their comments.	Please see responses to Letter IDs DMM72 and DMM63.
95	Vacco, D. (Town of Somerset)	95.71	The commenter includes Exhibits 18 through 23, and one copied comment as additional comments they are expressly incorporating into their letter.	Please see responses to Letter IDs 17, 28, 32, 44, 45, 49, and DMM17
95	Vacco, D. (Town of Somerset)	95.E3.1	Duplicate of <b>Letter ID 64</b>	Please see response to Letter ID 64
95	Vacco, D. (Town of Somerset)	95.E6.1	Duplicate of <b>Letter ID 6</b>	Please see response to Letter ID 6
95	Vacco, D. (Town of Somerset)	95.E15.1	Duplicate of <b>Letter ID 82</b>	Please see response to Letter ID 82
95	Vacco, D. (Town of Somerset)	95.E18.1	Duplicate of <b>Letter ID 17</b>	Please see response to Letter ID 17
95	Vacco, D. (Town of Somerset)	95.E19.1	Duplicate of <b>Letter ID 32</b>	Please see response to Letter ID 32
95	Vacco, D. (Town of Somerset)	95.E20.1	Duplicate of <b>Letter ID 28</b>	Please see response to Letter ID 28
95	Vacco, D. (Town of Somerset)	95.E21.1	Duplicate of <b>Letter ID 45</b>	Please see response to Letter ID 45

**Lighthouse Wind Project Case No. 14-F-0485**

Summary of Responses to PSS Comments

**Appendix B. Lighthouse Wind's Matrix of Individual Responses to Comments**

Letter ID	Commenter	Comment ID	Comment Summary	Lighthouse Wind Response
95	Vacco, D. (Town of Somerset)	95.E22.1	Duplicate of <b>Letter ID 49</b>	Please see response to Letter ID 49
95	Vacco, D. (Town of Somerset)	95.E23.1	Duplicate of <b>Letter ID 44</b>	Please see response to Letter ID 44
DMM2	Bansbach, J.	DMM2.1	Duplicate of <b>Letter ID 33</b>	Please see response to Letter ID 33
DMM3	Bansbach, J.	DMM3.1	Duplicate of <b>Letter ID 34</b>	Please see response to Letter ID 34
DMM5	Joerg, C. (Attorney for Niagara County)	DMM5.1	Duplicate of <b>Letter ID 101</b>	Please see response to Letter ID 101
DMM10	Ragan, C.	DMM10.1	Duplicate of <b>Letter ID 108</b>	Please see response to Letter ID 108
DMM15	Salmons, S.	DMM15.1	Duplicate of <b>Letter ID 42</b>	Please see response to Letter ID 42
DMM18	Mulholland, V.	DMM18.1	Duplicate of <b>Letter ID 31</b>	Please see response to Letter ID 31
DMM21	Bansbach, J.E.	DMM21.1	Duplicate of <b>Letter ID 35</b>	Please see response to Letter ID 35
DMM22	Bansbach, J.E.	DMM22.1	Duplicate of <b>Letter ID 33</b>	Please see response to Letter ID 33
DMM23	Bansbach, J.E.	DMM23.1	Duplicate of <b>Letter ID 34</b>	Please see response to Letter ID 34
DMM33	Gardner, J. and J.	DMM33.1	Duplicate of <b>Letter ID 57</b>	Please see response to Letter ID 57
DMM87	Fuerch, D.	DMM87.1	Duplicate of <b>Letter ID 90</b>	Please see response to Letter ID 90
DMM107	Dudley, S.	DMM107.1	Duplicate of <b>DMM108.</b>	Please see response to Letter ID DMM108
DMM123	DeMerle, D.	DMM123.1	Duplicate of <b>DMM127.</b>	Please see response to Letter ID DMM127