**CASE 17-F-0282 ALLE-CATT WIND ENERGY LLC**
**Responses to Comments on Preliminary Scoping Statement – March 26, 2018**

| ACWE Assigned No. | Comment Source | Topic | Comment | Response |
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| | **Ag & Markets[1] 3/5/18** | | | |
| **1.** | A&M p. 1 | General Comment | General Comment:<br><br>On Page 4 of the PSS it states that the project area is a mix of agricultural fields and wooded areas. Section V describes potentially significant adverse impacts of the project. There is a detailed discussion of various impacts pertaining to noise, visual impacts, shadows, impacts to birds, bats, streams and wetlands. This section is absent of any mention of impacts to agricultural lands. The applicant must discuss adverse impacts to agricultural lands.<br><br>Section VI describes information needed for the Application, however there is no mention of conducting field studies for the purposes of characterizing agricultural resources within the study area. The Applicant has described the project area as being comprised largely of a mix of agricultural fields and woods. The Applicant shall identify studies and field visits with the intent to accurately characterizing the status (active, inactive, fallow, etc.) and types of agricultural land and agricultural-related facilities impacted in the project area. Additionally, surveys should be conducted in order to identify sensitive agricultural resources that require avoidance, for example, unique agricultural lands such as orchards, vineyards and sugarbush; vulnerable agricultural soils; engineered | CWE concurs. Exhibit 4 will provide a more detailed description than summarized in the PSS of the land uses in the Project Area and the uses to which land to be used by the Project is currently being put. Exhibit 22 will address whether and how any agricultural land uses may be affected during construction and operation. |

[1] Comments that (i) address the PSS and (ii) were posted on or prior to the PSS comment deadline are addressed in this Summary.

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| | | | conservation practices such as diversion terraces; and other land and water management features.<br><br>Staffs comments below are intended to assist the Applicant in the development of a more robust Application which will more clearly identify how impacts to agricultural resources will be reduced or eliminated. It should be noted that this project is located near other proposed and fully operational commercial wind energy generating facilities and therefore, the Applicant should consider and address the potential cumulative impacts to agricultural resources. | |
| **2.** | A&M p. 1-2 | §1001.4 Exhibit 4: Land Use | Comments on Exhibits:<br><br>§1001.4 Exhibit 4: Land Use<br><br>Section 1001.4(g) requires maps showing several types of land use, including designated agricultural districts. The Applicant should produce a map showing areas used for rotational cropland, hayland, and pasture as well as a table including the acres of each of these land uses impacted. Exhibit 4 should also include a discussion of whether or not the project is consistent with each Town or County's Agricultural and Farmland Protection Plan, if one or more exists.<br><br>Sections 1001 .4U) and (k) require an assessment of compatibility of above-ground and underground interconnections and related facilities with existing, potential, and proposed land uses. The Applicant needs to include this information as it relates to agricultural land use. | The Application will include maps depicting the information as required by 1001.4(g). Aerial photography mapping as described in 1001.4(n) will depict the current land use of agricultural areas.<br><br>ACWE concurs |

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| | | | Section 1001.4(n) requires aerial photographs with the facility site and any interconnection routes and the location of access and maintenance routes. These images showing the aforementioned project components need to be provided in the Application. | ACWE concurs. |
| **3.** | A&M p. 2 | Electric System Effects | §1001.5 Exhibit 5: Electric System Effects<br>Section 1001.5(i) requires facility maintenance and management plans, procedures and criteria addressing several topics, including turbine maintenance. The Applicant should provide specific steps the Applicant will take to ensure the protection of agricultural resources, particularly during maintenance and repair activities when large turbine components need to be replaced on turbines located on and adjacent to agricultural lands. | ACWE concurs. |
| **4.** | A&M p. 2 | Preliminary Design Drawings | §1001.11 Exhibit 11: Preliminary Design Drawings<br>Section 1001.11 (g) requires design drawings for overhead and underground facilities (including burial depth for underground facilities) and other structures, such as turbine towers. The Applicant should clearly identify areas of proposed overhead collection facilities, if any, on agricultural lands. | ACWE concurs. |
| **5.** | A&M p. 2-3 | Geology, Seismology and Soils | §1001.21 Exhibit 21: Geology, Seismology and Soils<br>Section 1001.21 ( o) requires a map delineating soils types on the facility and the interconnections sites. The Applicant should include information in the application identifying | The Application will contain a map and table using data from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), Web Soil Survey, to display the locations of prime farmland, prime farmland if drained, and farmland of statewide importance. Based on correspondence with the NRCS, no |

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| | | | prime farmland, prime farmland if drained, unique farmland, farmland of statewide importance, and farmland of local importance. The Applicant should provide a map showing these soils and a table listing the number of acres of each of these soil groups that will be permanently and temporarily impacted by the project. In addition, the Applicant should identify and label the locations of vulnerable agricultural soils on construction drawings. Vulnerable agricultural soils are those identified as fragipans, lacustrine, dense basal tills, soils with a seasonally high water table, or soils with less than 5 feet of depth to bedrock and identified on construction drawings using the following codes:<br>A. "VE" (designate general area of vulnerability of erosion due to project facilities factor(s) of slope and/or the texture of the exposed soil).<br>B. "V/W" (designate the general area of vulnerability to soil horizon wetness as described above).<br>C. "VB" (designate the general area of vulnerability due to shallow depth to bedrock).<br>D. "V/OR" (designate the location of unavoidable organic farmland soils or muck soils). | soils in New York State are categorized as 'unique farmland'. Further the term 'Farmland of Local Importance' is not defined by USDA, nor is the Applicant aware of New York State defining this term. It may be defined in some instances by local agencies (e.g., county agricultural board, local regulations). If such designations are defined locally and are relevant to the proposed Facility, they will be included.<br>The preliminary design drawings will include an overview sheet showing the soils in relation to the Facility components. Additionally, Exhibit 21 will include mapping and discussion of soils as required by 16 NYCRR 1001.21. It is anticipated that the construction drawings, which are to be drafted post certification, would include the information listed by the commenter regarding vulnerable agricultural soils per any certificate conditions. |
| **6.** | A&M p. 3 | Terrestrial Ecology and Wetlands | Section 1001.22 Exhibit 22: Terrestrial Ecology and Wetlands<br>Section 1001.22(q) requires an analysis of the temporary and permanent impacts of the construction and operation | ACWE concurs that 1001.22(q) requires an analysis of temporary and permanent impacts of Project construction and operation on agricultural resources, including Project interconnections. The degree of information available from land owners and publicly available sources will determine the extent to which the subtopics under Topic A can be addressed. Concerning the avoidance of active agricultural land, |

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| | | | 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 impacts to agricultural resources. The Applicant should provide an assessment of impacts to engineered land and water management features and other agriculturally-related drainage improvements including, but not limited to the following:<br><br>A. Land and Water Management Features<br><br>a. Subsurface drainage areas (indicate each field)<br><br>b. Open Ditch<br><br>c. Diversion Terrace<br><br>d. Buried waterlines<br><br>e. Water sources (developed springs, etc.)<br><br>f. Unnamed water flow<br><br>B. Depth of Cover of electrical collection system if it varies from the agricultural standard of a minimum of 48 inches.<br><br>C. Access roads, laydown areas and other Project facilities identified at the time of Application submission indicating their proposed locations and the location and size of culverts to the extent required.<br><br>D. Proposed location of any other proposed project components. Active agricultural lands should be avoided | ACWE will use that as its objective but, of course, land owner desires must also be heeded. Culverts will be designed to meet the requirements of the NYSDEC and/or the U.S. Army Corps of Engineers, depending on the respective jurisdiction, and/or stormwater calculations necessary to support the SPDES permit. |

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| | | | when siting any project-related above ground facilities.<br><br>E. General locations for the buried electrical collection system for trench breakers, including a notation of the distance between breakers based on percent slope, or an appended generic chart of trench breaker spacing by degree or percent slope.<br><br>F. General locations for subsurface intercept drain lines to control soil saturation and/or aid trench breakers in minimizing water piping and excessive flow in the backfilled underground collection ditch, based on the vulnerable agricultural soils data and site monitoring. Such locations will generally coincide with "V/W" vulnerable agricultural soils and breaks in slopes. | |
| **7.** | A&M p. 4 | Site Restoration and Decommissioning | §1001.29 Exhibit 29: Site Restoration and Decommissioning<br><br>Sections 1001.29(b) and (c) include requirements for a plan for decommissioning and site restoration. The Applicant should prepare a decommissioning and site restoration plan which will include restoration of agricultural land and the removal of all above ground structures and foundations to a depth of at least 4 feet in agricultural land. Underground collection lines that are buried at a depth of 4 feet or more will be abandoned in place. | ACWE concurs with removal to 4 feet in agricultural lands. |

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| | **CENTERVILLE'S CONCERNED CITIZENS 3/5/18** | | | |
| **8.** | CCC p. 1-2 | General comments | General comments<br>• The Alle-Catt Preliminary Scoping Statement (PSS) lacks detail regarding specific studies and methods of impact assessment, and fails to include all of the contents required of a PSS under Article 10. See 16 NYCRR § 1000.5(l). The PSS identifies "exhibits" the regulations require be included in an Article 10 application. See PSS, Section VI, "Information Needed for the Application"; and PSS, Section XI, "Application Contents". The PSS implies that information on the subjects so identified will not be provided until an application is filed. However, this fails to acknowledge that the regulations also specify the information that must be included in a PSS. In that regard, the PSS is seriously deficient.<br>• For example, a PSS must include "proposed or on-going studies during pre-construction activities and a proposed period of post-construction operations monitoring for potential impacts to avian and bat species". 16 NYCRR § 1000.5(l)(2)(iv). No such information is provided in the Alle-Catt PSS.<br>• In addition, the regulations require an Article 10 applicant to respond to potentially significant adverse environmental and health impacts identified in "consultations" the Applicant has had with "the public, affected agencies, and | • Following the filing of these Responses, ACWE will provide an updated PSS and an invitation to participate in scoping consultations on the scope of studies required for the Application.<br>• The cited regulation is prefaced with 16 NYCRR § 1000.5(1)(2): "a preliminary scope of an environmental impact analysis containing a brief discussion, on the basis of reasonably available information, of the following items:"<br>• See PSS § VII. |

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| | | | other stakeholders" (16 NYCRR § 1000.5(l)(2)(ii); and must respond to "any other material issues raised by the public and affected agencies during any consultation". 16 NYCRR § 1000.5(l)(2)(xii). The Alle-Catt PSS fails to identify or respond to such concerns.<br><br>• In addition, a PSS must identify "the applicant's property rights and interests or those it proposes to acquire to all lands of the proposed facility and any private or public lands or private or public streets, highways or rights-of-way crossed by any interconnections necessary to serve the facility". 16 NYCRR § 1000.5(l)(7). The Alle-Catt PSS fails to provide any such information. As the preapplication stage of this proceeding advances, the Applicant will need to provide a map of all parcels for which it has obtained, or proposes to obtain property rights and interests.<br><br>In addition, a PSS must identify "the extent and quality of information needed for the application to adequately address and evaluate each potentially significant adverse environmental and health impact, including existing and new information where required, and the methodologies and procedures for obtaining the new information". 16 NYCRR § 1000.5(l)(2)(iii). This level of detail is lacking in the Alle-Catt PSS.<br><br>Detailed recommendations for information on specific subjects the Applicant should provide during the pre-application (or scoping) stage is provided under separate headings below. It should be noted that the scoping stage of the Article 10 review continues well past the comment deadline for the PSS. It should also be noted that the | • ACWE has executed leases for over 20,000 acres of land in the Project Area. As stated in PSS§ III, at the time of the PSS being filed, over 69% of the 108 wind turbine sites were on land leased land.<br><br>• The extent and quality of information needed is detailed in the regulations governing the Application contents: 16 NYCRR § 1001.1−1004.40. Also, please see PSS § VI.<br><br>• ACWE agrees that scoping will continue. ACWE will prepare an Updated PSS with proposed stipulations to focus that process. |

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| | | | minimum contents of an application are listed elsewhere in the regulations. See 16 NYCRR Part 1001. Accordingly, the majority of the PSS addressing the contents of an application (PSS, pp. 5-22) is premature and cannot be commented on until the Applicant proposes specific study plans.<br><br>We look forward to the opportunity to comment on the scope and methods of specific plans as they are provided by the Applicant. Considering the general and specific deficiencies identified here, Centerville's Concerned Citizens would not oppose additional time for the Applicant to respond, beyond the 21 days provided by the regulations at 16 NYCRR § 1000.5(g). | |
| **9.** | CCC p. 2 | Economic Benefits | Economic Benefits<br><br>The PSS emphasizes the discounted payment-in-lieu-of-taxes ("PILOT") payments the Project would provide ($5,000 per rated megawatt) together with direct monetary payments to host towns (an additional $3,000 per MW). Discounted PILOT payments are substantial because the value of the Project is so high. These payments are about one-quarter of what full taxation would provide. Once an Industrial Development Agency (IDA) sponsors a project, the project owner makes payments to the IDA, and the IDA must distribute the payments pro-rata to the taxing jurisdictions (here, the school districts, counties and towns)<br><br>The PSS states that payments to host towns would be in addition to PILOT payments, made through a county IDA. | The proposed structure is a balanced compromise that would allow the Project to be economically viable while still delivering significant economic benefits to the host towns and the county and school districts. Under the proposed structure and the pro-rata splits described in the comment, school districts would receive approximately 40% of the PILOT payments, or $17.75 Million over the first 20 years of the Project's operation. |

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| | | | However, "any payment" made to an "affected tax jurisdiction" such as a town up to the amount of full taxation must be made to the IDA. See Gen. Muni. L. § 854(16), (17). Accordingly, payments to towns in addition to PILOT payments, as proposed in the PSS, are arguably illegal. The arrangement proposed by the Applicant would result in a serious shortfall to school districts and counties in the Project Area, by restricting the base amount from which pro-rata PILOT payments are calculated.<br><br>Accordingly, the Applicant should calculate the annual payments that would be made the school districts, counties and towns if the full $8,000 per MW offered (about $3 million for this Project as proposed) is paid out in PILOT payments. | |
| **10.** | CCC p. 2-3 | Water Resources and Aquatic Ecology<br><br>Steep Slopes | Water Resources and Aquatic Ecology<br><br>1. Steep slopes<br><br>In much of the Project Area, steep slopes are not limited to primary waterways, as suggested at PSS page 3. Steep elevations, including ravine walls are features of small streams of all sizes throughout the Project Area. For example, Turbines 90, 91, 92 and 93 appear to be located near the top of steep slopes in the drainage basin of Johnson Creek, a Class C(TS) stream south of the Project Area in Farmersville. If the Applicant does not avoid such areas, excavation of turbine sites, access roads and underground electrical collection lines may pollute cold, clear streams and the wildlife habitat they provide. | • *See* 16 NYCRR § 1001.21(a) and § 1001.23(b) and (c) in particular for required information responsive to this comment. |

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| | | | In addition to aquatic wildlife habitat impacts, additional storm water volume creates more flow downstream which will increase downstream volumes. Increased downstream volumes of storm water can lead to increased pipe, culvert and bridge sizing to accommodate the new volume of storm water. The burden of maintenance on public roads subject to increased drainage conditions should not be placed on the towns.<br><br>The potential for increased turbid runoff and discharge of spilled petroleum products from disturbed areas is heightened by the poorly drained soils that characterize the Project Area, as noted on page 3. Soils in this area are generally poorly drained, unless located over glacial gravel located primarily in the valleys where turbines will not be located. Poorly drained soils will be associated with increased storm water drainage issues. Accordingly, the Applicant should identify each stream or headwater area that could be affected by increased runoff from construction or during operations, the applicable stream classification, slopes existing between facility components and the waterbody, and any vegetative, retention or other natural buffers to discharge of pollutants. Once potentially significant adverse environmental impacts are identified, the Applicant will need to describe how it proposes to avoid adverse impacts. See 16 NYCRR § 1000.5(l)(2)(v). Where avoidance cannot be achieved, the effectiveness of runoff minimization measures for areas of disturbance will need to be demonstrated. See 16 NYCRR § 1000.5(l)(2)(vi). For those areas, the Applicant should propose | |

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| | | | retention/detention ponds close to sites near steep slopes. | |
| **11.** | CCC p. 3-4 | Wetland Identification and Delineation | 2. Wetland Identification and Delineation<br>Watershed maps of the study area should include all streams, ponds, and wetlands. They should be divided into sub basins to aid in the identification of impacts to water resources and watershed functions including source water (i.e. drinking water). This includes analyses and evaluation of potential impacts during construction and operation on drinking water supplies and sources (surface and ground water).<br>DEC wetland maps, wetland habitat maps prepared by the National Wetland Inventory, and hydric soils maps should all be used as a preliminary guide to aid in the location of wetlands for delineation.<br>Wetlands should be delineated within 200 feet of the edge of any area of disturbance within the study area. This facilitates identification of buffers for mitigation purposes if needed.<br>Additional information the Applicant should provide includes:<br>• Assess impacts within the all areas of disturbance, i.e. areas where vegetation is initially removed (even if it is later replaced), and areas that will be traversed by heavy equipment.<br>• The Study Area is defined by regulation as the Project Area and the area within five miles of the Project Area. | • 16 NYCRR § 1001.22 and 1001.23 require the requested information. |

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| | | | Include a habitat map for the entire study area; habitat is not the same as National Landcover types. Evaluate vegetation in terms of its value as habitat. The report "Ecological Communities of NY State" (Edinger, 2002) should be used as a guide for this work.<br>• Assess impacts to habitats (including loss of specific habitat types) and evaluate cumulative forest fragmentation in terms of habitat loss and effect on watersheds.<br>• Evaluate invasive species likely to move in to areas where vegetation has been disturbed or removed. Evaluate the use of any biocides to control such vegetation, particularly in the vicinity of wetlands or streams.<br>• Assess impacts on all species that may occupy the study area, and that are listed as Species of Greatest Conservation Need by the NYS Wildlife Action Plan (2015). This will include wetland and aquatic species, pool-breeding amphibians, mammals, reptiles, and migratory as well as non-migratory birds.<br>• Additional field surveys that are season-specific may be needed to provide site specific information about these species and to inform mitigation plans. | |
| **12.** | CCC p. 4 | Forest Fragmentation | 3. Forest fragmentation<br>Most of the turbine sites appear to be proposed in forested areas, or will require access roads or underground electrical collection lines to cut through forested areas. For example, Turbines 102, 103, 104, 105, 106 and 107 | Locating turbines outside of forests typically means they are located in active agricultural fields, which is an area of concern for NYS Department of Agriculture and Markets. ACWE will consider both concerns when selecting wind turbine sites. Three of the six turbines mentioned in the comment (102, 104, and 105) are on cleared land and two others (103 and 106) are in forest near field edges. |

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| | | | appear to be in close proximity to the Farmersville State Forest, and Turbine 105 is either within the borders of the forest or completely surrounded by the forest. Project components should in the first instance be sited on previously disturbed lands away from forested areas. | |
| **13.** | CCC p. 4 | Impacts on birds | 4. Impacts on birds<br><br>Surveys of bird use and presence should include an evaluation of impacts by species for all birds listed by NYS Wildlife Action Plan (2015) as Species of Greatest Conservation Need. Information from the NYS Breeding Bird Atlas blocks within the Study Area should be used.<br><br>A map of bird migration routes should be provided, including the proximity of the Project to those routes.<br><br>Any discussion of cumulative impacts and mitigation measures should correspond to bird species, since impacts may vary by species.<br><br>Projected impacts on birds should be based on migration paths, breeding birds, and species habits (e.g. flight and feeding patterns). The information required to address the subject includes:<br><br>• Breeding bird and migratory bird surveys, conducted for a minimum of three years to account for annual variations due to weather and environmental conditions.<br><br>• Wind farm disturbance effects on breeding and wintering birds as well as migrating birds. Implement pre-construction monitoring and research to determine if there | ACWE has consulted and will continue to consult with DEC, U.S. Fish and Wildlife Service and will propose a stipulation governing the contents of Exhibit 22. |

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| | | | are other factors such as landforms, habitat features, and bird behaviors that increase collision risk at each turbine site.<br>• Identify 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 areas.<br>• For evaluating impacts on raptors including owls: 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 associated with direct turbine strikes, possible avoidance behavior, terrestrial habitat degradation and its effects on nesting, migrating, and wintering raptors. | |
| **14.** | CCC p. 5 | Impacts on bats | 5. Impacts on bats<br>Nine species of bats live in New York State. Most of these bats have experienced severe population decline due to a variety of factors. Bats are economically valuable to agriculture. Therefore impacts on all of these bat species should be evaluated. This includes examining the location of bat hibernacula, swarming and feeding areas, roosting trees and nursery areas, and bat migration patterns. Cumulative impacts on bats should be addressed on a regional population basis, not just for the Study Area. Specifically: | See response to prior comment. |

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| | | | • Bat monitoring should be conducted at those project component sites throughout the Project Area that are most likely to support bat activity. Monitoring should be conducted for a minimum of three years to account for annual variations in weather, prey, and other relevant environmental variables.<br>• The cumulative impacts of bat loss due to the combined mortality from White Nose Syndrome and wind turbine fatalities should be assessed. The cumulative impact assessment should discuss the impact on agriculture and ecosystems.<br>• The effect of the Project on three species of tree bats found in the Project Area should be assessed, including a cumulative impact assessment across the region.<br>• 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 should be assessed. | |
| **15.** | CCC p. 5 | Noise impacts on wildlife | 6. Noise impacts on wildlife<br>The potential for noise impacts on wildlife, particularly amplitude modulation (pulsing) at low frequencies (which may be perceived as a threat, such as a storm front), should be examined in any required study. Comments provided below and by agency parties on noise impacts address additional information about noise impacts. This information should be applied to an assessment of noise | Comment noted. |

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| | | | impacts on wildlife species. | |
| **16.** | CCC p. 5-6 | Visual Impacts | Visual Impacts<br><br>The PSS notes that “Project wind turbines will be large structures visible from most locations in the Project Area”. Although the PSS notes many viewers will be “blocked by nearby trees or buildings”, during the late fall, winter and early spring when leaves are off trees only viewers blocked by buildings would not be affected. There are few homes blocked by buildings because the area is rural. In addition, the visual impacts will affect viewers in the Study Area, five miles beyond the Project Area.<br><br>Visual impacts have the greatest potential to adversely affect residential property values because the visibility of large wind turbines diminishes the number of people who consider such property for sale. Visibility associates the property with other well-known adverse impacts of wind energy projects, such as noise.<br><br>The Applicant should propose a property value guarantee program to compensate properties authorized for residential use when they are sold. If the project results in no significant impact on property values, no compensation would be needed. However, property owners in the Study Area should not be made to rely on the Applicant’s conclusions about predicted impacts. The best measure of impact is the behavior of the market. If the market behaves as if the property has diminished value as a result of the Project, the Applicant should make property owners whole | The comment incorrectly paraphrases a PSS statement.<br><br>ACWE is not aware of any controlled studies that demonstrate this assertion. If CCC has any such studies, ACWE will certainly evaluate them and respond. Similar arguments have been raised and found lacking in respect to siting overhead transmission facilities. |

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| | | | at the time the property is put on the market. If property can be sold at fair market notwithstanding the Project, no compensation would be warranted. | |
| **17.** | CCC p. 6-7 | Noise Impacts | Noise Impacts<br><br>The excessively brief discussion of the manner in which the Applicant will assess project noise impacts relies entirely on predictive sound modeling and design goals. Substantial qualitative choices must be made in choosing modeling parameters and design goals. Conventional noise assessment models are best suited for broadband sound, that is, sound in the mid-frequencies that are the most audible to humans. These models are much less accurate for the kind of complex sounds generated by utility-scale wind turbines.<br><br>The PSS fails to acknowledge that assessing the potential impacts of such complex sounds calls for qualitative as well an quantitative planning to avoid annoyance and sleep disturbance. Sleep disturbance cause by nighttime noise is linked to several adverse health effects. It is therefore insufficient to limit the scope of potential impacts to "broadband sound", (PSS, at 4), because most of the sound power in wind turbine noise occurs in the low frequencies, including infrasound vibrations. These components of the noise do not "dissipate[ ] with distance from the wind turbine" to the same degree as broadband sound. Id. As found by the Siting Board in the recent Cassadaga Wind Article 10 decision, the low frequency and pulsating nature of wind turbine noise can make the | The PSS proposes design goals (see PSS Section 19, item 5) and study methods. ACWE will update the PSS with further details on study methods and additional design goals. |

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| | | | inside of homes and other buildings act as resonators, increasing the sound level inside compared to outside, and making the noise more noticeable inside because of the quiet background compared to outside. The Applicant should propose methods for assessing qualitative characteristics of wind turbine noise that are outside the scope of conventional noise assessment models.<br><br>Thus, the PSS states that "Exhibit 19 of ACWE's application will report results of computer modelling for predicted Project sound levels", but such modeling is subject to penalty decibels based on a qualitative assessment of the nature of the noise. For example, manufacturers' declared sound power data is generally used as the input to a noise propagation model, but manufacturers do not supply data on very low frequency sound and infrasound. Since the applicant will ultimately be obligated to provide an analysis of "low frequency noise or infrasound", (see 16 NYCRR § 1001.19(e)), the Applicant should discuss the use of penalty decibels to assess these qualities of project noise.<br><br>The PSS does not identify any design goals for noise. The PSS identifies the World Health Organization (WHO) as a source for design goals, but fails to say what goals the WHO recommends. The WHO has adopted a guideline of 40 decibels (dBA) at the outside of habitable structures during night hours. However, the WHO guidelines were not developed specifically for wind turbine noise. Guidance sponsored by the National Association of Regulatory Utility Commissioners (NARUC) was developed specially for wind | |

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| | | | turbine noise and recommends avoidance of project sound levels greater than 5 dBA above the pre-existing (LA90) sound level. This is consistent with guidance issued by NYSDEC, which recommends avoidance of project sound levels greater than 6 dBA above the preexisting ambient sound level. Both of these guidelines also recommend penalty decibels be added to sound modeling results for each of the following unusual characteristics of a noise source, all of which are associated with wind turbine noise: pulsations (amplitude modulation), substantial low frequency components, and operation of the noise at night. We specifically adopt a comment previously provided on the PSS by NYSDOH, regarding the need to consider the maximum loudness of significant sound level pulses anticipated in wind turbine noise:<br><br>In addition to a map of predicted noise impacts and the noise descriptors required by 16 NYCRR § 1001.19, DOH requests tabular noise modeling results inclusive of annual maximum daytime (L16max,day), annual maximum night (L8max,night) and annual logarithmic average nighttime (Leqnight) noise levels that can be directly compared to WHO guidelines for both participating and non-participating receptors (including seasonal use receptors) to evaluate potential sleep disturbance and annoyance. DOH also is concerned that noise modeling methods based on Hessler's method as described in NARUC, 2011 (i.e., based on ISO 9613-2) will not result in Expected Sound Levels that are comparable in timeframe (e.g., 8-hour, 16-hour, annual logarithmic average of night-time hours) to the | |

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| | | | aforementioned health-based WHO noise guidelines (1999, 2009). We are also concerned that disregarding annual meteorological conditions (which would be considered on CONCAWE corrections) could compromise the accuracy of modeled noise levels for the study area.<br><br>In addition to identifying Lmax acoustic descriptors as appropriate for assessing this project's noise impacts, we agree with NYSDOH that for public health-based protections (including protection against excessive noise and shadow flicker), the level of protection afforded should be identical for both participating and non-participating receptors. If the Applicant proposes differential standards, it should discuss the basis for its position.<br><br>The PSS states the Applicant will "compare [results of computer modelling for predicted Project sound levels] to design goals set to minimize community complaints and to meet standards of such organizations". However, comparing design goals to modeling results by itself is insufficient to assess the potential for community complaints. Considering that the Applicant operates other utility-scale wind energy projects in New York and elsewhere, it should provide information from operating projects about the nature and frequency of complaints, and the results of actual sound level measurements under comparable distance and topographic conditions at such other projects.<br><br>The PSS says noting about the locations and methods that will be used to determine the preexisting ambient sound levels in the Study Area (the Project Area and a five mile | |

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| | | | radius around the Project Area). To determine ambient sound levels the Applicant should adhere to the procedures described in ANSI/ASA S12.100-2014, "Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas", developed for wind energy projects among others, and and ANSI/ASA S12.9-2013 Part 3, "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-term Measurements with an Observer Present". | |
| **18.** | CCC p. 8 | Shadow Flicker | Shadow Flicker<br><br>We are in general agreement as to the scope of the Applicant's proposal to assess shadow flicker. However, no standards are proposed to limit how much time sensitive locations (e.g., churches, schools, residences, public recreational areas) would be exposed to shadow flicker. A discussion of such standards should be provided in any proposed shadows flicker study that goes beyond the wind industry standard of 30 hours per year. Connecticut, for example, limits shadows flicker exposure to five hours per year.<br><br>Considering the size of the Project Area, it is likely that one or more persons with photosensitive epilepsy will be exposed. Shadows flicker is known to trigger seizures in such persons. The study should identify survey or other methods to be utilized to identify where such persons live, in order to avoid such impacts. | The Siting Board adopted 30 hours per year in the decision in Case 14-F-0490 (Cassadaga Wind Energy). ACWE will evaluate potential shadow flicker at churches, schools, residences, and public recreational areas in the context of the 30-hour per year threshold.<br><br>According to the Epilepsy Society (2012), approximately five percent of individuals with epilepsy have sensitivity to light. Most people with photosensitive epilepsy are sensitive to flickering around 16-25 Hz (Hertz or Hz = 1 flash per second), although some people may be sensitive to rates as low as 3 Hz and as high as 60 Hz. Modern wind turbines (including the proposed models for this Project) typically operate at a frequency of 1 Hz or less, and there is no evidence that wind turbines can trigger seizures (British Epilepsy Association, 2007; Ellenbogen et al., 2012; Parsons Brinckerhoff, 2011; NHMRC, 2010). |

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| **19.** | CCC p. 8 | Energy System Impacts | Energy System Impacts<br><br>The PSS states that "for New York to meet its renewable energy goals, New York may need to develop all locations with wind resources suitable for utility scale development." PSS, at 6. This is a high-level policy statement that by itself cannot identify the specific contribution this project would make to the state's energy goals. Whether all locations with wind resources suitable for utility scale development can and should be developed is not a subject of this proceeding. To the contrary, the purpose of a siting review is to determine whether a specific project is properly sited, considering potential adverse impacts. It should be noted that New York lacks any state siting plan for developing utility scale renewable energy projects. The PSS policy statement by itself is not determinative of any siting issue that may be raised in this proceeding.<br><br>In order to demonstrate the project will provide a beneficial contribution to New York's energy goals, it is insufficient to simply point to the State's support for renewable energy. Considering that NYISO has informed PSC that western New York wind power is bottled in the region and consequently often displaces zero-emissions hydropower from Niagara Falls, the Applicant should propose studies and methods that can show the degree to which the Project will provide a net carbon savings, reduce electrical bills, and not displace other zero- or low-emissions generation in the region. In other swords, a demonstration should be provided that clearly defines and quantifies the Project's expected contribution to New York's greenhouse gas | • ACWE concurs; its statement questioned here was made in the context of Alternative Analysis.<br><br>• Exhibit 8 will address the identified topics. |

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| | | | emissions reduction goals.<br><br>Among other things, this demonstration should address the quality of the wind resource in the Project Area, the potential to displace other low-emissions generation, the ability to transport the Project's electricity to load centers of southeastern New York, and available methods to assess the need for ancillary power generation in light of the intermittent generation expected from this Project. | |
| | **NYS DEC 3/5/18** | | | |
| **20.** | DEC p. 2-3 | Potentially Significant Adverse Impacts of the Project | Section V. Potentially Significant Adverse Impacts of the Project<br><br>• This section should include discussion of impact avoidance, minimization and mitigation measures for direct and indirect loss of habitat and direct mortality of federally and state-listed T&E species, SSC, SGCN, and all migratory birds. Examples of such measures include siting turbines to avoid sensitive habitat, date restrictions on construction activities to avoid impacts to breeding birds and bats, and turbine curtailment at certain times of year and under certain environmental conditions to avoid or minimize direct impacts to bats and during spring and fall bird migration.<br><br>• This section should include discussion and evaluation of potential impacts to floodplains and floodways. This section should also include a commitment by the Applicant to | • Exhibit 22 of the Application will address impact avoidance, minimization, and as needed, mitigation efforts concerning wildlife and wildlife habitat. |

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| | | | undertake compensatory mitigation for all demonstrably unavoidable impacts to streams and wetlands in accordance with state regulations and guidelines, and restoration plans for areas of temporary disturbance, which should include re-planting of trees where temporary impacts to forested regulated wetlands and 100-foot adjacent areas results in clearing of vegetation. | • ACWE concurs and is pursuing consultation with DEC. |
| **21.** | DEC p. 3 | Other State and Federal Permits Required | Section VIII. Other State and Federal Permits Required<br>This section should include an Incidental Take Permit pursuant to ECL Article 11, 6 NYCRR Part 182. | The Updated PSS will include the Part 182 permit. |
| **22.** | DEC p. 3 | Applicable State Laws and Regulations | Section IX. Applicable State Laws and Regulations<br>This section should include ECL Article 11, and 6 NYCRR Part 182. | The Updated PSS will include Article 11 and Part 182 in the list of State laws and regulations. |
| **23.** | DEC p. 3 | Alternative Locations | Section XI. Alternative Locations<br>Factors considered when siting the project and potential alternative locations should include the presence of sensitive or rare natural communities, wildlife, and wildlife habitat, particularly habitat known or suspected to be utilized by federally and state-listed T&E species, SSC, and SGCN. | ACWE concurs with the comment when addressing the siting of individual WTGs; Section XI addresses alternative locations for the Project as a whole. |
| **24.** | DEC p. 3 | Land Use | Exhibit 4: Land Use<br>This exhibit should include a map that accurately identifies all active, inactive, abandoned, and plugged natural gas | To the extent these features are mapped on publically or readily available sources, ACWE concurs. |

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| | | | and oil wells, and all associated natural gas distribution lines, oil collector lines, and storage tanks. | |
| **25.** | DEC p. 3 | Alternatives | Exhibit 9: Alternatives<br>• An alternatives analysis evaluating environmental impacts should include how the project location and layout may impact sensitive or rare natural communities, wildlife, and wildlife habitat, particularly habitat known or suspected to be utilized by federally and state-listed T&E species, SSC, and SGCN.<br>• This exhibit should include a discussion of vegetative clearing, and the associated impacts under each of the alternatives analyzed.<br>• An alternative that should be considered in this section is not constructing any wind turbines. | ACWE concurs; the Application will consider impacts to wildlife and vegetation clearing in comparing alternative WTG locations and will evaluate the no-Project alternative. |
| **26.** | DEC p. 3-4 | Preliminary Design Drawings | Exhibit 11: Preliminary Design Drawings<br>• Site plan drawings should include specific locations of all active, inactive, abandoned and plugged natural gas and oil wells, and all associated natural gas distribution lines, oil collector lines, and storage tanks.<br>• All site plan drawings showing wetland and stream resources, including 100-foot adjacent area boundaries for all wetlands expected or determined to be under state jurisdiction, should be displayed at a scale of 1":50'.<br>• The preliminary design drawings for the project should include ground disturbance limits and vegetation clearing | • To the extent these features are mapped on publicly or readily available sources, CWE will provide the requested information. How this information can be incorporated while maintaining legibility of the site plan drawings will be determined by the design professional preparing the drawings.<br>• ACWE will provide site plans drawn to a scale of 1"=100'. These drawings will show delineated wetlands and streams. In addition, ACWE will provide plans at locations of wetland, stream, and adjacent area impacts drawn to a scale of 1"=50'.<br>• Site plans will show limits of disturbance and vegetation clearing. |

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| | | | limits around all project components.<br><br>• Design drawings should demonstrate that the project has been designed to co-locate project components to the maximum extent practicable (e.g., collection lines and access roads) along existing corridors, and minimize fragmentation of forests, grasslands, and other habitat areas.<br><br>• Wetland and stream impacts should be shown on the site plan together with all project elements that involve any potential ground disturbance, grade changes, change to runoff patterns and the construction of any facilities.<br><br>• Plans should include wetland and stream crossings with culverts designed for a 100-year storm event and designed to maintain stream continuity and incorporate specifications such as those described in NYSDEC's Stream Crossing Guidelines, available at: http://www.dec.ny.gov/permits/49060.html.<br><br>• The landscaping plan should include a vegetation impact map depicting the project footprint and extent and location of tree removal, including depiction of indirect impacts to forests, which should extend at least 300 feet into the forest from the cleared edge. The exhibit narrative | • Facility design will attempt to co-locate Facility components to the maximum extent practicable. Co-location efforts will be shown on the Preliminary Design Drawings included in Exhibit 11 of the Application. See response to Comment ACWE No. 39 regarding wetland and stream impact drawings. Information associated with vegetation impacts, including direct and indirect impacts, will be discussed in Exhibit 22 (Terrestrial Ecology and Wetlands). Such impacts will not be addressed in Exhibit 11.<br><br>• Wetland and stream impacts will likely be shown on a separate set of drawings. The Preliminary Design Drawings will include a significant amount of design-specific information per the requirements of PSL 1001.11, and as such it is unlikely that adding additional information to these drawings (e.g., stream, wetland, and adjacent area impacts as recommended by the commenter) would be effective. In fact, such additional information would likely detract from the information required to be presented on the design drawings.<br><br>• Culverts will be designed to meet the requirements of the NYSDEC and/or the U.S. Army Corps of Engineers, depending on the respective jurisdiction, and reasonable storm assumptions.<br><br>• To determine those areas where trees will be removed, the Facility footprint will be depicted on recent aerial imagery, and the acreage of forest clearing will be quantified and discussed in Exhibit 22 of the Application. Coverage of indirect impacts to areas of interior forest will be calculated by applying a 300-foot buffer to all existing and proposed forest edges and quantifying the affected area using GIS. Information associated with vegetation impacts, including direct and indirect impacts, |

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| | | | presenting the acreage of direct tree removal should also include the acreage of indirect impact. | will be presented in Exhibit 22 (Terrestrial Ecology and Wetlands). Such impacts will not be addressed in Exhibit 11. |
| **27.** | DEC p. 4 | Construction | Exhibit 12: Construction<br>This exhibit and preliminary plans should include construction controls to avoid interference with and impacts to existing active, inactive, abandoned and plugged natural gas and oil wells and all associated natural gas distribution lines, oil collector lines, and storage tanks. | ACWE concurs. |
| **28.** | DEC p. 4 | Geology, Seismology and Soils | Exhibit 21: Geology, Seismology and Soils<br>• This section should include a description of potential impacts to local water wells, oil wells, gas wells, and gas pipelines.<br>• The Applicant should consult all available oil and gas well information from the NYSDEC website. NYSDEC should be consulted if any oil and gas wells will be encountered during project construction or operation.<br>• This exhibit should include a description of other measures that have been or will be taken by the Applicant to identify the locations of potential oil and gas wells and gas pipelines, including title searches to identify potential historic property interests regarding oil and gas wells and geotechnical surveys.<br>• The Application should include the following construction procedures that will be implemented in the event any plugged or unplugged oil and gas wells or pipelines are | Comment noted. Potential impacts to water wells will be addressed within Exhibit 23 per the regulations. The Applicant will use publicly available data to identify the location and status of oil and gas wells on the Facility Site. The location of any oil and gas wells incidentally observed during other on-site surveys will also be documented. Exhibit 4 of the Article 10 Application will include a description of potential project related impacts on these facilities, if any. Prior to construction, the contractor will be required to conduct a one-call service to verify the extent and known location of all utilities. This effort will include a confirmation of utility response through the Dig Safely New York system, requirements for which will be included in the Article 10 Application. |

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| | | | discovered during construction or operation of the project:<br>o Immediately cease all activities and power down all equipment at the location where the well or pipeline is encountered, evaluate any emergency conditions, and contact local emergency personnel if the situation is dire;<br>o Immediately notify the NYSDEC Regional Minerals Manager and provide critical information including the well or pipeline location and any known well details; and<br>o Continue the cessation of construction activities until NYSDEC authorizes recommencement of construction activities. | |
| **29.** | DEC p. 4-5 | Exhibit 22 Terrestrial Ecology and Wetlands Mapping and Identifying Ecological Communities | Exhibit 22: Terrestrial Ecology and Wetlands<br>Section 22(a)<br>• This section should include maps and shapefiles depicting the plant communities in the project area, transmission line corridor, and adjacent properties, which show the approximate locations and extent of identified plant communities, including areas of invasive species concentrations, overlaid with areas of proposed disturbance, and be based on results of observations and field verification during on-site surveys, roadside surveys from adjacent parcels, and review of recent aerial imagery and NLCD information.<br>• Specific information on, and a detailed description of, all ecological communities identified within parcels that will host project components as well as adjacent parcels | Comment noted. The Application will include a detailed description of the existing plant communities on the Facility Site based on aerial imagery, NLCD information, and onsite surveys. These communities will be classified according to community descriptions included in the Ecological Communities of New York State (Edinger et al., 2014). Exhibit 22 of the Application will describe proposed measures that will be implemented to avoid, minimize, and potentially mitigate for any temporary and permanent impacts to all existing plant communities on the Facility Site that could result from the construction and operation of the Facility. For the transmission line, which is subject to Article VII of the PSL, measures that will be implemented to avoid, minimize, and potentially mitigate for any temporary and permanent impacts will be presented in the Article VII application. The Applicant will provide the NYSDPS and NYSDEC with GIS shapefiles depicting the plant communities within the Facility Site at the time of Application filing. |

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| | | | should be provided and classified according to a recent and widely accepted source of information on ecological communities.<br>• A list of all plant species observed during on-site field investigations and incidentally while in the project area, including the date(s) each species was observed, should also be provided. | |
| **30.** | DEC p. 5-6 | Exhibit 22 Terrestrial Ecology and Wetlands Quantifying Impacts to Vegetation | Section 22(b)<br>• This section should quantify the number of acres of each plant community type impacted and describe whether the impact is a permanent loss of vegetative cover, temporary impact, or conversion of one cover type to another.<br>• This section should also include calculations and a discussion of the indirect impacts to forests that will occur as a result of the construction of the project, which should extend at least 300 feet into the forest from the cleared edge, and include, among other effects, alterations in temperature, solar exposure, and possible spread or introduction of invasive species to forest interiors.<br>• This section should also address the terrestrial and aquatic invasive species in 6 NYCRR Part 575 and listed at:<br>http://www.dec.ny.gov/docs/lands_forests_pdf/islist.pdf,<br>and discuss a plan to prevent, control, and manage invasive species throughout the project area. The plan should apply to all prohibited and regulated invasive | ACWE concurs. |

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| | | | species and include the following:<br><br>o A summary of the survey methods to be used to identify and mark existing non-native invasive species within the project area (i.e. baseline survey), including the transmission line corridor, and if such surveys occur more than six (6) months prior to the start of vegetation clearing or ground disturbance, they should be repeated during the growing season as close as possible to the start of clearing or disturbance activities;<br><br>o Action plan for pre-construction management of non-native invasive species, including threshold for action and specific methods that will be employed to ensure that packing material, imported fill, and fill leaving the project area will be free of non-native invasive species material, seeds, and parts to the extent practicable;<br><br>o Specification on how fill materials to be placed within the project area will be free of non-native invasive species material, seeds, and parts, or only used within areas already containing those specific non-native invasive plant and invertebrate species infestation;<br><br>o Detailed description of specific project site grading, erosion and sediment control methods that will be used to prevent the introduction, spread, or proliferation of all non-native invasive species to the extent practicable;<br><br>o Details of procedures for preventing the spread of invasive invertebrates and diseases, and a discussion of how the Applicant will comply with the state quarantine and | |

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| | | | protective zones, where applicable;<br><br>o Detailed implementation plans for ensuring that equipment and personnel arrive at and depart from the project area clean and free of all non-native invasive species material, seeds, and parts;<br><br>o A detailed description of cleaning procedures for removing non-native invasive species material, seeds, and parts from equipment and personnel, and properly disposing of materials known to be or suspected of being infested;<br><br>o Detailed description of the BMPs or procedures that will be implemented, and the education measures that will be used to educate workers;<br><br>o Detailed description of a post-construction monitoring and corrective action plan, which should be a minimum of five (5) years, to achieve the goal of no net increase in invasive species abundance, and survey measures and procedures for revising the plan in the event the goals of the initial plan are not met within a specified timeframe;<br><br>o Anticipated methods and procedures used to treat non-native invasive species that have been introduced or spread as a result of the construction, operation or maintenance of the project (based on comparisons against the baseline survey); and<br><br>o Landscape re-vegetation plans, including specification of native seed mix to be used, as appropriate. | |

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| **31.** | DEC p. 6 | Exhibit 22 Terrestrial Ecology and Wetlands Measures to Avoid Minimize and Mitigate Vegetation Impacts | Section 22(c)<br><br>This section should contain a detailed description of the proposed measures that will be implemented to first avoid, and if impacts are demonstrably unavoidable, then minimize and mitigate for any temporary and permanent impacts to existing, non-invasive plant communities, particularly grasslands, interior forests, wetlands, shrublands, and young successional forests, as a result of the construction, operation and maintenance of the project. To avoid and minimize impacts to vegetation, linear project components such as access roads and interconnection lines should be co-located, and all turbines, buildings, storage areas, and other structures should be constructed in areas already developed or disturbed, to the greatest extent possible. Post-construction vegetative restoration should include reseeding disturbed areas with appropriate native seed mix or planting native woody species, as necessary, to recreate or enhance wildlife habitat. | . The Application will provide the requested description but co-location will be pursued to extent practicable. |
| **32.** | DEC p. 6-7 | Exhibit 22 Terrestrial Ecology and Wetlands Identifying Wildlife and Wildlife Habitat in the Project Area from Field Surveys | Section 22(d)<br><br>This section should include:<br><br>• Identification and description of plant communities, plant species and wildlife habitat, which includes field identification and verification of aquatic habitats, plant communities, and other wildlife habitat that could potentially support federally or state-listed T&E species, SSC, and state SGCN as documented during on-site field investigations (e.g., ecological cover type assessments, | ACWE concurs. generally, but will need to consult with DEC on what is meant by “detailed location maps and ecological characterization data for all vernal pools located within 500 feet of all proposed areas of disturbance”.<br><br>Vernal pools will be inventoried at the time of wetland field delineations in the spring of 2018, and within the defined wetland delineation study area. The Application will identify vernal pools that could be disturbed by construction or operation of the Facility. A discussion will be included that evaluates the use of the identified vernal pools by amphibians and the potential impacts to those species. |

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| | | | habitat assessments, wildlife surveys, and wetland delineations);<br><br>• Information on amphibians and reptiles based on the New York State Amphibian & Reptile Atlas Project, database records obtained from NHP, NYSDEC and USFWS, assessments of suitable habitat within the project, and any field observations made on-site or in the vicinity of the project;<br><br>• To the extent that vernal pools and their functions, including the surrounding upland habitat, may be impacted by construction, operation or maintenance of the project, those features should be identified under appropriate seasonal conditions, and the impacts should be identified and assessed in the Application, which may require, in consultation with NYSDEC and NYSDPS, the development and implementation of site-specific surveys for amphibian and reptile species under appropriate seasonal conditions in order to quantify the level of impact from the project. The Applicant should also submit detailed location maps and ecological characterization data for all vernal pools located within 500 feet of all proposed areas of disturbance;<br><br>• Information on bird species that may be present or utilize the project area at some point during the year based the following sources: existing data from NHP, NYSDEC, and USFWS; assessments of suitable habitat within the project; field observations made on-site or in the vicinity of the project; New York Breeding Bird Atlas; US Geological Survey Breeding Bird Survey; Christmas Bird Count; Hawk Migration Association of North America; eBird; The Nature | There are no mapped Karst Features within the Project Site nor is it anticipated that there are any calcareous shoreline outcrops. However, if these features are identified within the Project Site during field surveys they will be discussed. |

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| | | | Conservancy surveys/reports; The Kingbird publication; reaching out to local birding groups for information on recent and historical occurrences; and any other publicly available sources that may provide relevant information regarding bird occurrences within or in the vicinity of the project; and<br>• Description of potential impacts to calcareous shoreline outcrops and karst features, if present within or adjacent to the project, and any species that may utilize these habitats. | |
| **33.** | DEC p. 7 | Exhibit 22 Terrestrial Ecology and Wetlands Identifying Ecological Communities From Published Sources | Section 22(e)<br>This section should include a plant and wildlife species inventory known or likely to occur in or near the project based on existing data available from the NHP, NYSDEC, USFWS, local experts, New York State Amphibian & Reptile Atlas Project, New York Breeding Bird Atlas, US Geological Survey Breeding Bird Survey, Christmas Bird Count, Hawk Migration Association of North America, eBird, The Nature Conservancy surveys/reports, The Kingbird publication, and any other publicly available source that may provide relevant information. The inventory should include the typical species of birds, mammals, herpetofauna, and terrestrial invertebrates found in the region and likely to occur within or in the vicinity of project. On-site field surveys and/or the availability of suitable habitat, should also be used to identify species that could potentially occur within or in the vicinity of the project. The inventory should specify whether species were observed, known to occur in project area, or are predicted | Comment noted. The Application will include a description of the existing plant communities on the Facility Site based on aerial imagery, NLCD information, and onsite surveys. These communities will be classified according to community descriptions included in the Ecological Communities of New York State (Edinger et al., 2014). Exhibit 22 of the Application will describe proposed measures that will be implemented to avoid, minimize, and potentially mitigate for any temporary and permanent impacts to all existing plant communities on the Facility Site that could result from the construction and operation of the Facility. For the transmission line, which is subject to Article VII of the PSL, measures that will be implemented to avoid, minimize, and potentially mitigate for any temporary and permanent impacts will be presented in the Article VII application. The Applicant will provide the NYSDPS and NYSDEC with GIS shapefiles depicting the plant communities within the Facility Site at the time of Application filing. |

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| | | | to occur based on habitat characteristics and historical records. The Applicant should also consult with NHP, NYSDEC and USFWS to identify any listed, rare and sensitive T&E species, SSC, and SGCN, or the habitats that support such species, that may be impacted by the project. | |
| **34.** | DEC p. 7-8 | Terrestrial Ecology and Wetlands | Section 22(f)<br>This section should include:<br>• A narrative analysis and associated mapping to explain and illustrate potential and expected construction and operational impacts to vegetative cover types, wildlife habitats, including a discussion of impacts from habitat fragmentation, wildlife concentration areas, travel corridors, and terrestrial and aquatic organisms;<br>• Discussion of all direct and indirect construction-related impacts that may occur to wildlife and wildlife habitat, including incidental injury and mortality due to construction activity and vehicular movement, habitat disturbance and loss associated with vegetation clearing and earth-moving activities, and the displacement of wildlife from preferred habitat;<br>• Discussion of all direct and indirect operational impacts, including avian and bat collisions, loss and degradation of habitat, forest and grassland fragmentation, wildlife displacement and, to the extent any documented wildlife travel corridors or concentration areas are identified within or in the vicinity of the project, direct and indirect impacts to | See Response to Comment No. 24. |

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| | | | such corridors and concentration areas;<br>• Discussion of potential short- and long-term impacts to plants, animals, and habitats that may result from the application of biocides, if any, during site preparation, construction, operations, or maintenance of the project;<br>• A summary impact table that clearly quantifies anticipated temporary and permanent impacts associated with all project components in relation to wildlife habitats, identified concentration areas or travel corridors, and vegetation cover types, particularly grasslands, interior forests and young successional forests, if affected;<br>• Information regarding the presence of federally and state-listed T&E species, SSC, and SGCN, and a discussion of the project's potential to impact such species or their habitats, which should be based on database records obtained from the NHP, other known records documented by NYSDEC, USFWS, and observation during on-site wildlife and habitat, ecological, and wetland surveys; and<br>• If it is determined by the Applicant, NYSDEC, or USFWS that the construction or operation of the project is likely to result in the take of a listed or protected species, including the modification of habitat on which the listed species depends on, the Applicant should submit the components of an Incidental Take Permit pursuant to 6 NYCRR Part 182. | |
| **35.** | DEC p. 8 | Exhibit 22 Terrestrial Ecology and Wetlands | Section 22(g) | ACWE concurs. |

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| | | Avoid, Minimize and Mitigate | The project design, construction controls, and operational measures that can be reasonably implemented to first avoid, then minimize, and mitigate impacts to wildlife and wildlife habitat as a result of the construction, operation and maintenance of the project should be described. This section should include a discussion of measures to first avoid and, if impacts are demonstrably unavoidable, minimize direct impacts to individuals of declining, federally and state-listed and protected species through appropriate and effective turbine siting and operational curtailment regimes, and indirect impacts associated with habitat loss, fragmentation, and displacement. A commitment to mitigate, in an appropriate and timely manner, for any demonstrably unavoidable impacts to listed species should also be discussed. Such mitigation should be determined only after avoidance and minimization measures are evaluated, and must result in a net conservation benefit to the target species. | |
| **36.** | DEC p. 8-9 | Terrestrial Ecology and Wetlands | Section 22(h)(1)<br>This section should include:<br>• Discussion of the extent, methodology and results of all avian, bat and other wildlife surveys conducted by the Applicant or its agents within or in the vicinity of the project;<br>• USFWS and NHP database information regarding bat hibernacula are located within the study area and project;<br>• Discussion of the project's location in the Atlantic flyway and any other identified migration corridors, as appropriate, | ACWE concurs, although survey reports will be provided in and not in advance of the Application.<br>The entire northeast United States is a broad geographic area over which to evaluate cumulative impacts of ACWE's project. ACWE will address in Exhibit 22 of its application cumulative impacts to birds and bats of the Project together with all "nearby" wind projects as defined in the comment, with the exception that it will not estimate impacts from projects that have yet to publish a wind turbine layout in public. |

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| | | | and include a discussion of the potential cumulative impacts of the project on bird and bat species and the habitats that support them with respect to the other wind energy projects or turbines that are currently operating and proposed to be constructed at other sites nearby the project and in the state, and at operating projects throughout the northeast. “Proposed project” or “proposed turbines” should be defined as any project or turbines that are associated with a project for which a PSS has been submitted to NYSDPS, posted on the docket, and a case number assigned under Article 10 of the PSL, or are part of a project that has completed or is currently undergoing the SEQR process, for which there is a publicly available DEIS or FEIS document, as of the date of submission of the Application and “nearby” should be defined as the Counties of Allegany, Cattaraugus, Chautauqua, Erie, Wyoming, and Steuben as well as all operating or proposed wind energy projects that are located within 100 miles of the project, including those in other adjacent counties, states or provinces;<br><br>• Wildlife and habitat impact analysis descriptions including an identification, evaluation, and assessment of direct and indirect project-related impacts to avian and bat species, particularly: declining species, federally and state-listed T&E species and their habitats; wildlife concentration areas; migration corridors; and forest and grassland habitats. The NYSDEC Region 9 Wildlife Office should be contacted to obtain the most recent breeding, wintering, and habitat data for state-listed species. USFWS should be | |

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| | | | contacted to obtain the most recent breeding, wintering, and habitat data for federally listed and protected species. NYSDEC and USFWS should be contacted for guidance on any studies that may be required to evaluate the potential impacts the project could have on protected and listed T&E species;<br><br>• Avian and bat occupancy and usage of the project site compared with other proposed and existing wind energy projects located nearby the project and in the state, and with operating projects throughout the northeast and analyses should be based on a discussion and comparative analysis of the extent, methodology, and results of the pre- and post-construction wildlife studies conducted for this project, and other wind energy projects for which data are publicly available, as well as any additional information provided by NYSDEC and USFWS;<br><br>• A literature review and impact analysis evaluating how the construction and operation of the project will affect bat species, including an assessment of the potential population-level effects turbine-caused mortality is likely to have on migratory tree bats at a regional scale; and<br><br>• A cumulative impact analysis to evaluate the actual and expected impacts from the construction and operation of the project as they relate to other proposed and operating wind energy projects nearby the project and in the state, which describes and shows:<br><br>o examination of data on currently installed wind energy capacity in the state, as well as projected increase in | |

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| | | | installed wind energy capacity for the life of the project;<br><br>o avian mortality (birds/MW/year) documented over the past 20 years, and estimated annually and over the life of the project;<br><br>o bat mortality (bats/MW/year) documented over the past 20 years, and estimated annually and over the life of the project;<br><br>o likely species composition of bird and bat mortalities at the project, based on pre-construction studies conducted within or near the project, results of the bird and bat conservation strategy, and post-construction study results from nearby operating projects;<br><br>o estimated take of federally listed or protected and state-listed species at the project, based on post-construction studies done in the state and the northeast, results of eagle collision risk modeling, as provided by USFWS, and any other publicly available relevant information;<br><br>o acres of each habitat type lost directly through clearing and cover type conversion;<br><br>o acres of each habitat type lost indirectly due to functional loss/degradation of habitat (for the purposes of forest fragmentation analyses, it is assumed that indirect effects will extend up to 300 feet beyond the limits of disturbance); and<br><br>o cumulative impacts of forest and grassland habitat fragmentation. | |

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| | | | Any draft copies of all wildlife survey reports requested by state or federal agencies prior to the submission of the Application and produced for the project, including any associated maps and shapefiles, should be provided as soon as possible. Final reports incorporating comments provided by NYSDEC and USFWS, along with any other supplemental material or information requested by these agencies, should be included with the Application. Additionally, if hibernacula are identified within the project area, or five miles from any project component or boundary, the location and distance to the nearest identified hibernaculum should be provided separately and confidentially to NYSDEC. | |
| **37.** | DEC p. 10 | Exhibit 22 Terrestrial Ecology and Wetlands Methods for Bird and Bat Surveys; Post-Construction Monitoring | Section 22(h)(2)<br>This section should be developed in a manner consistent with NYSDEC's Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects, June 2016. Additional post-construction monitoring should occur if it is determined that a take of a federally or state-listed T&E species will occur. Details of the post-construction monitoring program should be determined on a site-specific basis through discussions between NYSDEC, USFWS, and the Applicant, and be in place prior to the start of project operation. | ACWE generally concurs, but expects the monitoring plan to be finalized in the certificate rather than later. |
| **38.** | DEC p. 10 | Exhibit 22 Terrestrial Ecology and Wetlands Bird and Bat Impact | Section 22(h)(3)<br>This section should include a bird and bat conservation | The requested plan will be included in the Application. |

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| | | Avoidance, Minimization and Mitigation; Conservation Plan | strategy plan, which includes:<br>• Description of the bird and bat impact avoidance and minimization techniques implemented, mitigation options, potential monitoring and adaptive management responses, and operational adjustments to be implemented at the project; and<br>• Discussion and analysis of information collected as part of pre- and post-construction monitoring surveys at the project and other proposed and existing wind energy projects in NYS as described in Section 22(h)(1), and information provided by state and federal agencies.<br>If it is determined that take of a listed species is likely to occur the components of an Incidental Take Permit pursuant to 6 NYCRR Part 182 should be provided. Proposed impact avoidance actions should be included and, if it is demonstrated that complete avoidance of impacts to listed species is not practicable, the minimization actions and mitigation measures to be implemented should:<br>• be developed in consultation with NYSDEC and USFWS;<br>• result in a net conservation benefit to the target species; and<br>• require more intensive and thorough post-construction monitoring than what the NYSDEC Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Project (June 2016) describe and adequately measure the project's impact on the target specie. The post | |

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| | | | construction monitoring plan should, at a minimum, specify: the expected and allowed level of take of each target species; survey monitoring methods, effort, duration, data reporting and compliance documentation; construction parameters; operational adjustments; and mitigation measures sufficient to ensure the Applicant complies with the substantive requirements of 6 NYCRR Part 182. | |
| **39.** | DEC p. 10-12 | Exhibit 22 Terrestrial Ecology and Wetlands Mapping and Delineation | Section 22(i)<br>• This section should include a map and shapefiles showing probable wetland boundaries for federally and state-regulated wetlands and adjacent areas occurring within 500 feet from all project components. The map and shape files should be developed using interpretation of aerial imagery signatures, on-site observations, analysis of topography, existing data bases of hydric soils, and wetland mapping maintained by NWI and NYSDEC and be referred to as "predicted wetlands."<br>• The determination of wetland boundaries during on-site field delineations should be made according to the three-parameter methodology described in the Corps Wetland Delineation Manual (Environmental Laboratory, 1987), and the appropriate Regional Supplement to the Corps of Engineers Wetland Delineation Manual. In addition, boundaries of freshwater wetlands regulated under ECL Article 24 must be delineated according to methods described in the New York State Freshwater Wetlands Delineation Manual (1995). | ACWE will delineate wetlands following the methods described by the DPS in its comment concerning 1001.22(i) on p. 30. Specifically, on-site field delineations, performed in accordance with USACE and NYSDEC protocols, will consist of boundary flagging within a 200-foot wide corridor centered on linear Facility components (e.g., access roads, electrical interconnect), within a 250-foot radius of turbines, and within a 200-foot radius of other components such as permanent meteorological towers, O&M building, and substation. This area will be defined as the Delineation Study Area. Aerial photo interpretation, existing databases/previous delineations, analysis of topography, and estimation based on the results of on-site studies will be used to extend field delineated wetland boundaries out to 500 feet. This area will be defined as the Approximation Study Area and wetlands identified in this way will be referred to as approximate wetlands. Wetlands within 50 meters of mapped NYS Freshwater wetlands will be identified if they fall within the study areas described above. The Applicant will adhere to this field-delineation study corridor, and associated results will be provided to NYSDEC personnel to facilitate a jurisdictional determination. Determination of wetland boundaries will be conducted as described by the commenter.<br><br>The Application will include, as an Appendix, a stand-alone Wetland and Stream Delineation Report, that will include mapping necessary to depict all delineated features within the Delineation Study Area. Depending on the extent and number of |

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| | | | • All wetlands within 50 meters of a NYSDEC mapped wetland, regardless of size or connectivity, should be delineated and included in field mapping. These delineations should include all vernal pools and other similar wetlands regardless of the possible lack of hydrologic connectivity to waters of the United States. Vernal pools should be delineated in accordance with the appropriate Regional Supplement to the Corps of Engineers Wetland Delineation Manual.<br><br>• Wetland boundaries should be defined in the field by sequentially numbered pink surveyor's flagging marked "wetland delineation", the locations of which should be documented using GPS technology with reported sub-meter accuracy. Wetlands identified by these methods should be referred to as "delineated wetlands", and wetlands that are verified by the Corps and the NYSDEC will be referred to as "jurisdictional wetlands."<br><br>• On-site field delineations should consist of boundary flagging of all wetlands and adjacent areas that occur within 500 feet of any edge of disturbance around all project components such as access roads, electric interconnection and transmission lines, turbines and other components such as temporary and permanent meteorological tower(s), staging areas, O&M building(s), substation(s), etc. These delineation protocols should apply to all wetlands and vernal pools.<br><br>• All wetland boundaries should be keyed to the submissions described in Exhibit 11 (Preliminary Design Drawings). The interpolated boundaries shown on site | delineated features that must be depicted, the Applicant will determine the appropriate scale of such mapping.<br><br>Site plans provided in Exhibit 11 will depict delineated wetlands and streams in the Delineation Study Area and approximated wetlands and streams within the Approximation Study Area. These maps will include all project components. However they will not depict impact areas as these will be included in a separate set of impact drawings to be provided with Exhibit 22 and drawn at a scale of 1"=50'.<br><br>The Applicant anticipates providing all GIS shapefiles concurrent with the filing of the Article 10 Application, not prior to filing, to assure consistency between information included in the Application and the associated shapefiles.<br><br>The Applicant will identify wetlands that are 12.4 acres or greater as potentially under state jurisdiction, whether mapped or not. The Applicant will consult with the NYSDEC to determine the potential jurisdictional status of other wetlands hydrologically connected to state jurisdictional wetlands, or that otherwise may warrant consideration as state jurisdictional wetlands. |

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| | | | plans should be differentiated from field delineated boundaries when displayed on maps, site plans, and shapefiles.<br><br>• Information on the onsite non-Article VII interconnections, and predicted presence and extent of wetlands on the remainder of site properties and adjacent properties within 500 feet of areas to be disturbed by construction, should also be included in the Application. For adjacent properties without accessibility, initial surveys should be based on remote-sensing data, interpretation of published wetlands and soils mapping, roadside observations, and aerial photography.<br><br>• Maps depicting all project components, including proposed grade changes and the limits of ground disturbance and vegetative clearing, field-delineated wetlands and 100-foot adjacent areas, and predicted wetland boundaries and adjacent areas located within 500 feet of all areas to be disturbed by construction should be included in the Application and shapefiles depicting the information should be provided to NYSDEC prior to the submission of an Application. The Application should be updated as needed with final wetland delineations, determinations, and the resulting impact calculations, following field visits by NYSDEC and the Corps.<br><br>• The Applicant should complete field wetland delineation activities and submit a report to the regional NYSDEC Bureau of Habitat staff and the Corps that includes shapefiles and site plans (1":50' scale) showing wetland boundaries, permanent and temporary structures, stream | |

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| | | | crossings, roads, power interconnects and the limits of any of the following: grading, filling, excavation, and vegetative clearing. Field delineations should be performed and mapped wherever these activities occur within 500 feet of any state-protected wetland. The Applicant should facilitate the confirmation of the field delineated wetland boundaries by regional NYSDEC Bureau of Habitat and Corps staff. This information should be provided in a timely manner so that field visits are during the growing season, as snow cover and out-of-growing-season timing can make accurate wetland delineation difficult, if not impossible. NYSDEC recommends that the Corps be consulted for their concurrence with delineations performed on wetlands that are not state-jurisdictional.<br>• Information should be provided indicating which delineated wetlands are likely state-regulated, including those that are part of wetland complexes that meet state-criteria for jurisdiction (e.g.,12.4 acres or larger, and/or support listed species), but are not currently mapped. All state-regulated wetlands should be identified by NYSDEC's alphanumeric code in addition to the code assigned by the Applicant during delineation. Investigation areas for wetland delineations may need to be extended to make these determinations. At a minimum, the desktop mapping approach described in this section should identify all wetlands that potentially meet state-criteria for jurisdiction. | |
| **40.** | DEC p. 12 | Exhibit 22 Terrestrial Ecology and Wetlands Wetland Data | Section 22(j)<br>This section should include a description of and summary | ACWE concurs. |

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| | | | table showing the field data collected regarding vegetation, soils, and hydrology, and copies of all Wetland Determination Data Forms, compiled into a Wetland and Stream Delineation Report that should be appended to the Application. | |
| **41.** | DEC p. 12 | Exhibit 22 Terrestrial Ecology and Wetlands Wetland Functions | Section 22(k)<br>This section should include qualitative scores that assess the functions and values described in NYSDEC regulations for each delineated wetland and be based on a methodology proposed by the Applicant and approved by NYSDEC. See 6 NYCRR § 664.5. | ACWE concurs. |
| **42.** | DEC p. 12 | Exhibit 22 Terrestrial Ecology and Wetlands Mapping and Connectivity | Section 22(l)<br>This section should include:<br>• Maps and shapefiles of wetland boundaries and 100-foot adjacent areas within 500 feet of all project components and any disturbed areas, mapped using interpretation of aerial imagery signatures, on-site observations, analysis of topography, existing data bases of hydric soils, and wetland mapping maintained by NYSDEC and NWI;<br>• Description of the hydrologic connectivity of all wetlands within the project area, including a summary of those wetlands anticipated to fall under NYSDEC jurisdiction (ECL Article 24) and Corps jurisdiction (Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act). Assessments of potential state wetlands jurisdiction | See response to Comment #39. Please note there are no Significant Coastal Fish and Wildlife Habitat Areas in the Study Area. |

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| | | | should include both “mapped” and “unmapped wetlands” that meet NYSDEC’s 12.4-acre size threshold, including any wetlands of any size separated by less than 50 meters which function as a unit in providing wetland benefits, pursuant to 6 NYCRR Part 664, or otherwise meet state criteria for jurisdiction; and<br>• A summary of off-site wetlands adjacent to the project and any disturbed areas that may be hydrologically or ecologically influenced or impacted by development of the project, including Significant Coastal Fish and Wildlife Habitat Areas designated by NYSDOS, and public lands, to determine their general characteristics and relationship, if any, to the delineated wetlands within the project area. | |
| **43.** | DEC p. 12 | Exhibit 22 Terrestrial Ecology and Wetlands Wetland and Stream Crossing Methods | Section 22(m)<br>This section should include an identification and quantification of temporary and permanent impacts to, and any permanent conversions of, wetlands and state-regulated 100-foot adjacent areas based on the proposed footprint of all project components and associated impact assumptions. This assessment should include a description of applicable permanent forest conversion, if any, which would occur as a result of the construction or maintenance of the project. Impacts should be summarized and presented in a table that identifies and calculates the following: the type of impact, including but not limited to permanent or temporary fill and forest conversion, to each wetland and adjacent area; associated crossing methodology for each wetland, clearly discerning between | ACWE concurs. |

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| | | | federal and state wetlands, and adjacent area impacts; acreage of each type of impact to regulated wetlands and adjacent areas; associated delineation and NYSDEC wetland identification code; and the page number on preliminary design drawings depicting the resource. Impacts to wetlands should also be presented on a separate set of site plan drawings at 1":50' scale, showing wetland boundaries, permanent and temporary structures, stream crossings, roads, power interconnects, and the limits of disturbance. | |
| **44.** | DEC p. 13-14 | Terrestrial Ecology and Wetlands<br>Wetlands and Stream Crossing | Section 22(n)<br>• This section should include a discussion of all avoidance and minimization measures considered during site planning and design, and an indication of methods to be implemented to avoid wetland impacts, including stream crossing methodology and a description of the project's construction and operation in relation to the standards established by ECL Articles 15 and 24. Direct impacts to wetlands and streams should be minimized by utilizing existing or narrow crossing locations wherever possible. Additional measures may include consideration of alternative siting or routing options, trenchless crossings (such as HDD or other special crossing techniques), equipment restrictions, herbicide use restrictions, and erosion and sedimentation control measures.<br>• Plans to restore temporary disturbances, including replanting trees in temporarily disturbed forested areas, | Comment noted.<br>The Article 10 Application will include a general discussion of measures considered, and description of methods to be implemented to avoid and mitigate wetland impacts, rather than a table. Measures may include consideration of alternate siting or routing options, special crossing techniques, equipment restrictions, herbicide use restrictions, and erosion and sedimentation control measures. Where impacts are unavoidable, the anticipated mitigation measures to be implemented to offset impacts to wetlands (and any state-regulated 100-foot adjacent areas as warranted) will be discussed. Should compensatory mitigation be required, the Applicant will prepare a conceptual mitigation plan consistent with the regulatory provisions outlined in this comment. The Applicant anticipates providing all information concurrent with the filing of the Article 10 Application, not prior to filing, to assure consistency between information included in the Application. Potential impacts to wetlands and streams will be outlined and quantified in 1001.22(m).<br>The Applicant anticipates obtaining agency jurisdictional determination of delineated wetlands and streams prior to the submittal of the Article 10 Application. |

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| | | | should also be provided in this section.<br><br>• Where impacts are demonstrably unavoidable, and have been minimized to the greatest extent possible, the anticipated mitigation measures to offset impacts to wetlands and 100-foot adjacent areas should be discussed, including the use of reasonable alternative stream and wetland crossing methods. Pursuant to 6 NYCRR § 663.5(g), a conceptual mitigation plan for impacts to state-regulated wetlands and adjacent areas. This should be provided to NYSDEC at least 30 days before the submission of an Application and, at a minimum, meet the following provisions:<br><br>o the mitigation should occur on or in the immediate vicinity of the project (i.e., elsewhere on the same wetland);<br><br>o the area affected by the proposed mitigation should be regulated by the Freshwater Wetlands Act and 6 NYCRR Part 663 after mitigation measures are completed; and<br><br>o the mitigation should provide substantially the same or more benefits than will be lost through the proposed activity.<br><br>Evaluation of mitigation options should occur during initial planning of the project and may require permission from landowners that have not agreed to host project components on their property. Off-site mitigation should only be considered if an analysis is provided showing that all options within the immediate vicinity were thoroughly evaluated and determined to not be feasible. Please note that in-lieu-fee does not meet the state requirements for | Section 1001.22(n) of the Application will describe the anticipated Environmental Compliance and Monitoring Program (ECMP) to be implemented during Facility construction to adhere to various permit conditions and protect wetlands, streams, and other waterbodies. |

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| | | | mitigation.<br><br>• The Application's discussion of avoidance and minimization should be updated upon final verification of wetland boundaries and jurisdictional determinations. Final impact calculations to the 100-foot adjacent area of state-regulated wetlands and associated mitigation should be based on verified delineation boundaries for jurisdictional wetlands. Alternative analyses should be based on the final verified delineation boundaries.<br><br>• This section should also describe the Environmental Compliance and Monitoring Program to be implemented during project construction, including Environmental Monitor(s) present on site during construction and restoration activities. The duties of the Environmental Monitor should be described.<br><br>• This section should include a table of all federal wetlands, state-regulated wetlands, streams, and environmentally sensitive areas that could potentially be impacted by the project as depicted in preliminary design drawings or wetland delineations. The table should:<br><br>o Identify the corresponding page number on preliminary design drawings depicting the resource;<br><br>o Include wetland delineation types, NYSDEC stream classifications, and description of resources within environmentally sensitive areas;<br><br>o For each resource, explain if the resource could reasonably be avoided; | |

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| | | | o Propose site-specific actions to minimize impacts to resources that are not avoided;<br>o Propose site-specific actions to mitigate impacts that are not avoided; and<br>o Propose an appropriate compliance monitoring schedule to ensure mitigation is successful, including adaptive management actions to be implemented should the planned mitigation fail. | |
| **45.** | DEC p. 14 | Exhibit 22 Terrestrial Ecology and Wetlands 1000.22(o) | Any T&E Species Avoidance, Minimization and Mitigation Plan should be included and outline an estimate of take of listed species, an evaluation of all avoidance measures considered and, if full avoidance is not feasible, a discussion of why such actions are impracticable. | ACWE concurs. |
| **46.** | DEC p. 14 | Exhibit 22 Terrestrial Ecology and Wetlands 1000.22(p) | The invasive species prevention and management plan should also include a description of the monitoring and correction measures that will be implemented. | ACWE concurs |
| **47.** | DEC p. 14 | Water Resources and Aquatic Ecology Section 23(a)(1) Mapping | Exhibit 23. Water Resources and Aquatic Ecology<br>This section should include maps at a scale that supports legibility, showing depth to bedrock, depth to high groundwater, and karst features throughout the project area based on results of preliminary geotechnical investigations and data provided by the Web Soil Survey. | ACWE concurs. |
| **48.** | DEC p. 14-15 | Water Resources and | • A survey of all residents, businesses and property owners | ACWE generally concurs, except that ACWE will gather publically available |

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| | | Aquatic Ecology Section 23(a)(2)<br>Water Wells | within one mile of the proposed project should be conducted to solicit information regarding private wells, well design and production information, well construction details, usage patterns, and water quality data and the map should reflect this information.<br>• The following sources of publicly available information should be used to create the map: NYSDEC, the USGS Office of Groundwater, USDA Soil Conservation Service, USDA Natural Resources Conservation Service Web Soil Survey, NYSDOH, NYSDEC, the County District Offices of Allegany, Cattaraugus, and Wyoming Counties, and other local municipalities, as well as from data collected during subsurface investigations in the project area.<br>• This section should also include a description of impact avoidance to local wells. | information from DOH, DEC and other public sources on the location of public and private drinking water sources but does not plan to conduct the suggested water well survey. Such a survey and any resulting identification of private wells is unnecessary for the purposes of 1001.23 (a) and 1001.21. Identifying all wells within one mile of the Project would be a burdensome effort that would at best produce information about wells outside the zone of concern. ACWE will develop a notification, construction practices and monitoring plan, to be included in Exhibit 23, which plan will cover wells which are known to exist or anticipated to exist, due to the presence of residences, commercial structures or similar structures, within 500 feet of a location where construction activities such as excavation, HDD, foundation installation or blasting. |
| **49.** | DEC p. 15 | Water Resources and Aquatic Ecology Section 23(a)(3) Impacts to Water Sources | • This section should include information regarding anticipated areas and methods of potential dewatering during construction and operation based on publicly available databases and geotechnical borings conducted at a sub-set of turbine locations. Any determination of long-term dewatering should be addressed during final geotechnical investigations to be conducted at each turbine location.<br>• This section should also include a general discussion of likely sources of water for any concrete mixing operations. Details associated with the design and layout of facilities for withdrawal and transport of source water should be | ACWE generally concurs, but see response to comment ACWE No. 48 concerning water wells. |

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| | | | provided.<br><br>• This section should also include a table summarizing the location, depth, usage, and water quality data obtained for all identified public and private water wells. The source(s) of and collection system for water for construction period uses, including for concrete batch plant, invasive species wash station(s), fire control, and other uses should also be described. The locations of public and private water wells should be verified through field observations where property access rights are obtained by the Applicant. Water well locations should be indicated on maps showing groundwater aquifer, distinguishing whether each well location is approximate or confirmed. GIS data for the public and private well locations should be provided. An analysis and evaluation of potential impacts during normal and drought conditions from the construction and operation of the project on drinking water supplies, groundwater quality and quantity in the project area, taking into account data collected regarding the nature and extent of exiting groundwater contamination within the project area, including potential impacts on public and private water supplies, including private wells within a one-mile radius of the project area, and wellhead and aquifer protection zones. Plans for notification and complaint resolution during construction of the project for owners and operators of public and private wells within a one-mile radius of the project area should be developed and included in the Application. | |

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| **50.** | DEC p. 15 | Water Resources and Aquatic Ecology<br>Section 23(b)(1)<br>Mapping Water Resources | This section should also include a map, at a scale that supports legibility, of ephemeral streams and wetlands, within and adjacent to the project using data from NYSDEC, ESRI, USGS, NWI, and stream data collected during on-site surveys of water resources. Wetland and stream delineations should identify all surface waters within a 500-foot wide corridor from the edge of disturbance around all project components and areas of disturbance. Stream mapping outside of these areas should be based on NYSDEC mapping and stream classifications and other mapping sources as applicable. Maps and shapefiles identifying all the foregoing should be submitted to NYSDEC, and these data should also be provided in tabular format able to be easily cross-referenced to maps. | Maps depicting wetland and stream boundaries within the Delineation and Approximation Study Areas will be included in Exhibit 22 as described in response to comments in 1001.22(i). The Applicant anticipates providing all GIS shapefiles concurrent with the filing of the Article 10 Application. |
| **51.** | DEC p. 15-16 | Water Resources and Aquatic Ecology<br>Section 23(b)(2)<br>Water Classification | This section should include, for each waterbody, a description of the New York State listed Water Classification and Standards pursuant to 6 NYCRR Part 800-941 and including Part Item Numbers, WINs, physical water quality parameters, flow rate, biological aquatic resource characteristics (including species of vertebrates and invertebrates, habitat, and presence of aquatic invasive species) and other characteristics of such surface waters, including intermittent streams in the project area using publicly available data, and when necessary, supplemented by field data collected during wetland and stream delineations or information provided by NYSDEC. WINs can be obtained by scheduling a meeting with NYSDEC Region 9 Bureau of Fisheries. Aquatic invasive species as identified by NYSDEC that are observed while | Comment noted.<br><br>For all surface waters on the Facility Site, the Application will contain a description of New York State listed Water Classification and Standards, WIN, physical water quality parameters, flow, biological aquatic resources (including species, habitat and presence of invasive aquatic species), and other characteristics of such surface waters, including intermittent streams, in the Facility Site using publicly available data and observations made during the course of on-site wetland/stream delineations and ecological community investigations.<br><br>It is anticipated that all Facility component interactions with open water will be limited to small streams in the upper reaches of the watershed, and as such it is not expected that aquatic invasive species will be of concern. However, if common aquatic invasive species, as identified by the NYSDEC, are encountered while conducting delineations and field investigations they will be documented and |

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| | | | conducting delineations and field investigations, should be documented and included in the Application. See 6 NYCRR Part 575. | included in the Application. |
| **52.** | DEC p. 16 | Water Resources and Aquatic Ecology<br>Section 23(b)(3)<br>Public Surface Water Supplies | This section should include an identification of all surface water drinking water supply intakes within one mile of the project and contained within the drainage basin in which the project is located, or if none are located within one mile, the nearest downstream surface water drinking supply intake. A discussion of potential impacts to drinking water supplies due to the project or onsite non-Article VII interconnections should include characterization of the type, nature, and extent of service provided from the identified source. | Exhibit 23 will identify such intakes based on publicly available information. |
| **53.** | DEC p. 16-17 | Water Resources and Aquatic Ecology<br>Section 23(b)(4)<br>Water Body Impacts | • This section should include a narrative discussion that describes all potential impacts to water resources, including wetlands, streams and lakes. This section should also include a discussion of potential impacts to any large waterbodies as a result of relevant project components such as docking facilities, water intake, and wastewater discharge sites. NYSDEC water withdrawal regulations will apply if the project will withdraw more than 100,000 gallons per day.<br>• Environmental impacts to be discussed and addressed should include thermal changes to waterbodies due to vegetative clearing, changes to in-stream structure, morphology and stability, potential impacts to or taking of federally and state-listed T&E species, SSC, SGCN, and | The Applicant clarifies that it does not propose project components that include "docking facilities, water intake, and wastewater discharge sites" nor potential impacts to any large waterbodies, as the commenter suggests.<br><br>Section 1001.23(b)(4) of the Article 10 Application will include a calculation of the approximate acreage and linear distance of surface waters that would be temporarily or permanently impacted based on the proposed Facility footprint and associated impact assumptions, and field delineated stream boundaries. Such impacts will be presented in a table that identifies the type of impact (e.g., buried collection, crossing in the dry, HDD, access road). A map of all anticipated HDD locations in relation to surface water resources will also be included. A statement that BMPs and guidelines for crossing streams regulated under Article 15 will be developed in consultation with NYSDEC and NYSDPS. No impacts from dredging/sediment removal are anticipated on this project. Therefore, sediment sampling and discussion of sediment |

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| | | | the effects of turbidity on nearby habitat. If any dredging/sediment removal is required, sediment sampling should be conducted prior to removing material in accordance with protocol established by NYSDEC. Impacts of (potentially contaminated) sediment resuspension/dispersion should be discussed.<br><br>• Where appropriate and practical, mitigation actions should be discussed to offset acute and chronic impacts to waterbodies.<br><br>• A demonstration that any discharge into waters of the United States comply with the effluent limitations, effluent prohibitions, water quality-related effluent limitations, and pre-treatment standards set forth in 6 NYCRR §§ 750-1.11, 750-2.1; water quality standards and thermal discharge criteria set forth in 6 NYCRR Parts 701, 702, 703 and 704; standards of performance for new sources set forth in 6 NYCRR §§ 750-1.11, 750-2.1; prohibited discharges set forth in 6 NYCRR 750-1.3; and regulations and criteria otherwise applicable to such activities should be included.<br><br>• Source(s) of and collection systems for water for construction period uses, including for concrete batch plant, invasive species wash station(s), fire control, and other uses should be provided.<br><br>• For any HDD installations, a “frac-out” contingency plan should be provided to address any inadvertent releases. The feasibility of using overhead crossings with poles more than 50 feet from the top of banks, or trenchless crossings, should be assessed and implemented for all streams | resuspension/dispersion are not proposed. |

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| | | | proposed to be crossed.<br>• A table should be provided that identifies all resource impacts to surface waters and includes:<br>o A calculation of the approximate acreage and linear distance of surface waters that will be temporarily or permanently impacted based on the proposed project footprint and associated impact assumptions, and field delineated stream and wetland boundaries;<br>o The construction impact type at each waterbody, and, as applicable, the crossing methodology at each waterbody (e.g. buried collection line, access road) and construction technique used (e.g. HDD or access road utilizing temporary bridge);<br>o Typical details or BMPs to be used and detailed BMPs should be provided for each construction technique as appendixes to the Application;<br>o All stream crossings for temporary and permanent roads, culvert placement specifications, and construction details, the expected flow calculations, and demonstrate culvert capacity with BMP considerations for culvert placement;<br>o Clear photographs depicting all perennial and intermittent stream crossings identified for the project, including photos upstream and downstream of the crossing site, referenced to the stream WIN and crossing location on maps and shapefiles; and<br>o All items in Section 23(b)2 should also be incorporated | |

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| | | | into this table. | |
| **54.** | DEC p. 17 | Water Resources and Aquatic Ecology Section 23(b)(5) Alternatives to Avoid Impacts | • This should include an evaluation of alternatives that may entirely avoid impacts to regulated waterbodies. Where impacts are unavoidable and have been minimized to the greatest extent possible, mitigation measures should be discussed, including habitat creation, the use of water storage, stormwater reuse, and offsetting water conservation, regarding groundwater and surface water impacts.<br>• All stream crossing structures that will include bankfull width at the crossing location, and the dimensions of the proposed structure should be included.<br>• The specific methodology for controlling water flow during construction should be discussed for each stream crossing.<br>• For all underground lines, an indication of whether the crossing will be done via open cut or a trenchless installation method should be provided, including for all open trench crossings an analysis demonstrating that a trenchless method is not feasible.<br>• Work prohibition dates should be established in consultation with NYSDEC after the Applicant identifies which streams will be crossed.<br>• BMPs should be employed throughout the remainder of the year for all stream crossings.<br>• Permanent proposed stream crossing methods should meet NYSDEC stream crossing guidelines | The Application will identify reasonable avoidance measures, and where impacts are unavoidable, mitigation measures for impacts to groundwater and surface water will be reviewed. Any work prohibition dates associated with crossings of State-protected streams under ECL Article 15 will be complied with, unless otherwise agreed to with NYSDEC Regional Biologists. Proposed crossing methods will comply with the NYSDEC stream crossing guidelines. All culvert installations will be designed to meet the requirements of the NYSDEC and/or the USACE, depending on the respective jurisdiction. Additional means of avoiding water quality and quantity impacts will be addressed through compliance with the Project SWPPP. |

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| | | | (http://www.dec.ny.gov/permits/49060.html), and all new, replaced, and upgraded culverts will be designed for a 100-year storm event, allowing for continued stream connectivity, designed to incorporate specifications as described in NYSDEC stream crossing guidelines.<br>• The Applicant should provide NYSDEC and NYSDPS with final engineering plans for all stream crossings prior to the Siting Board's determination on whether to issue a certification pursuant to Article 10 of the PSL. | |
| **55.** | DEC p. 18 | Water Resources and Aquatic Ecology<br>Section 23(d)<br>Spills and Refueling | Section 23(d)<br>• This section should contain spill containment requirements for electric transformers at the substation and turbines sites.<br>• This section should reflect that all refueling areas will be greater than 100 feet from all freshwater wetland areas. | ACWE concurs. |
| **56.** | DEC p. 18 | Water Resources and Aquatic Ecology<br>Section 23(e)(1)<br>Impacts to Aquatic Species | Section 23(e)(1)<br>• This section should include critical and sensitive habitat in the analysis of the impact the construction and operation of the project on biological aquatic resources.<br>• The presence of invasive species within the project site should be documented during wetland and stream delineations and other on-site investigations, as described in Exhibit 22. Maps and shapefiles of the locations of aquatic invasive species should be provided to NYSDEC before the Application is submitted. | ACWE concurs. In regard to aquatic invasive species, as indicated in response to comment 51 above, if common aquatic invasive species, as identified by the NYSDEC, are encountered while conducting delineations and field investigations they will be documented and included in the Application.<br>All associated shapefiles will be provided to DEC (and DPS) concurrent with the filing of the Application. See response to comment 58 below. |

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| **57.** | DEC p. 18 | Water Resources and Aquatic Ecology<br>Section 23(e)(2)<br>Aquatic Species Takings | This section should include an identification, discussion, and evaluation of reasonable avoidance measures and, where impacts are demonstrably unavoidable, minimization and mitigation measures regarding project-related impacts on all aquatic biological resources, particularly listed species. If it is determined by the Applicant, NYSDEC, or USFWS that the construction, operation or maintenance of the project is likely to result in the take of a listed species, including the modification of habitat on which a listed species depends, the Applicant should submit with the Application an avoidance, minimization and mitigation plan that demonstrates a net conservation benefit to the affected species as defined pursuant to 6 NYCRR Part 182, along with the informational requirements of an Incidental Take Permit, as provided for in 6 NYCRR Part 182, including proposed actions to avoid all impacts to listed species. If impacts are unavoidable, the Application will demonstrate this and contain thorough and clear justification of why complete avoidance of impacts is not feasible, how the proposed minimization actions will minimize impacts to the maximum extent practicable, and proposed mitigation actions. | ACWE concurs. |
| **58.** | DEC p. 18-19 | Other Comments | Other Comments<br>NYSDEC requests all shapefiles be provided where required and when possible and be suitable for use in GIS software via ESRI's ArcGIS suite of software (e.g. ArcMap). NYSDEC also requests that shapefiles contain all applicable project and survey components as described in | The Applicant anticipates providing all GIS shapefiles concurrent with the filing of the Article 10 Application, not prior to filing, to assure consistency between information included in the Application and the associated shapefiles.<br>ACWE will provide the draft reports to DEC when they are available. |

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| | | | NYSDEC's Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects (June 2016), be submitted to NYSDEC as soon as possible, and revised as applicable throughout pre-application development of the project. Shapefiles should depict the location of all project components including (separately): extent of current project site; turbine locations; new access and maintenance roads; existing roads that will be widened/altered; electric collection and transmission lines (specified above ground and/or underground); laydown and storage area(s); substation(s); temporary and permanent meteorological tower(s); any other temporary or permanent infrastructure constructed in support of the project; all areas to be cleared around turbines, access roads, electric lines, and all other project components. Additionally, shapefiles should show all wildlife survey locations, as applicable, including (separately): breeding bird survey transects; eagle/raptor survey locations; winter raptor survey locations and driving routes; viewsheds for eagle and winter raptor observation points, indicating the area visible from each point; bat acoustic monitoring and/or mist net locations; radar unit location; and aerial nest survey area and transects. Draft reports of all bird, bat, habitat, and wetland surveys should be submitted to NYSDEC at least 60 days before the Applicant submits an Article 10 Application and include maps and shapefiles depicting the location(s), observation date(s), species, and behavior(s) of all T&E species and SSC individuals observed during surveys and incidentally in the project area. | |

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| | **NYS Dept. of Health 1/26/18** | | | |
| **59.** | DOH p. 1 | General Comment | General Comment:<br>The Preliminary Scoping Statement (PSS) for the Canisteo wind energy facility is very brief but indicates that the application will broadly address all the requirements of the Public Service Law and 16 NYCRR 1001, and provides some additional detail on specific elements of some exhibits. Department staff's specific comments (below) reflect our desire to convey to the applicant our expectations for the studies conducted as part of the application. | ACWE will submit an Updated PSS based on the comments received and these responses to initiate the Stipulation process. |
| **60.** | DOH p. 1 | Wind Power Facilities | Exhibit 6: Wind Power Facilities<br>Exhibit 6 of the application should include a presentation of all setback requirements and/or recommendations for turbines from roads, occupied structures (dwellings, commercial, industrial, and institutional), barns and unoccupied structures, areas of public gathering, and electric transmission lines. This exhibit should also include an explanation for the rationale for the setback distances as required/recommended by the manufacturer's specifications, the applicants or any local laws or ordinances. The exhibit also should present the degree to which the applicant has accommodated the setbacks in the facility layout. Please modify the PSS accordingly. | The Application will list and explain those setbacks that ACWE proposes to use in siting WTGs and other project components, including setbacks from seasonal residences and routinely used non-residential buildings. |

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| **61.** | DOH p. 1-2 | Public Health and Safety | Exhibit 15: Public Health and Safety<br><br>Although Exhibit 15 of the PSS indicates that the application will present the information required by 16 NYCRR § 1001.15, additional detail was not provided pertaining to several issues. DOH requests that the potential short- and long- term public health and safety impacts associated with construction and operation of the facility be identified, described, discussed, and monitored, as necessary, for all receptors (including participating and non-participating residences, including seasonal receptor,) and other receptors such as commercial and public spaces and/or medical facilities, etc.).<br><br>For wind power facilities, blade throw, tower collapse, audible frequency noise, low-frequency noise, ice throw and shadow flicker, and other impacts must be evaluated in the application.<br><br>The PSS also does not present the nature and scope of the studies to be conducted in the application for the management and treatment of any sanitary wastes generated by the construction and operation (e.g., any septic systems at an Operations and Maintenance building). The facility and its study area is in areas with full-service County Health Departments that implement and enforce the State Sanitary Code as well as their own County regulations. Any planned septic systems should be designed by a NYS licensed professional engineer (in good | Exhibits 19 and 24 of the Application will list predicted noise and shadow impacts at the following types of receptors, whether on participating or non-participating properties: (i) year-round residences, (ii) seasonal residences, (iii) other regularly occupied buildings where occupants would be sensitive to noise or shadows, such as schools, post-offices, town halls, businesses, medical facilities, and churches. Reviewers will be able to estimate noise and shadow impacts for receptors not included in the above list, e.g., dairy barns, dilapidated houses, outdoor public places, by reviewing the noise contours and shadow maps to be in the Application.<br><br>Exhibit 15 of the Application will describe the nature and degree of the risks of ice throw, blade throw and tower collapse and explain the basis for choosing the proposed setbacks. The proposed setbacks can be applied to any individual receptors, but the Application will not evaluate these risks for each and every receptor individually. The Application will explain why the proposed setbacks adequately protect the public's health and safety. Exhibit 15 will also discuss the potential health impacts of audible frequency noise and shadow flicker, and Exhibits 19 and 25 will list predicted impact levels (in terms of dBA and shadow flicker hours) for sensitive receptors. See also, the PSS at pages 4, 12 and 18-22.<br><br>The Application will describe the plans for sanitary waste management during construction and operation, including the expected process for obtaining any necessary approvals for a septic system at the O&M building.<br><br>Exhibit 19 will describe and discuss the effect of meteorological conditions on amplitude modulation and will discuss the derivation of ACWE's design goals based on NARUC and WHO reports. |

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| | | | standing) and the necessary approvals should be sought from the county health departments.<br><br>The application also should include, in its evaluation of potential health impacts associated with shadow flicker, a discussion of the cumulative frequency of shadows as it relates to potential photosensitive epilepsy health outcomes. Additionally, the National Association of Regulatory Utility Commissioners' (NARUC) January 2012 "Wind Energy & Wind Park Siting and Zoning Best Practices and Guidance for States" includes both short- and long- term flicker guidelines.<br><br>The PSS indicates that peer-reviewed scientific literature will be cited in support of studies of potential health effects associated with audible noise, low frequency noise and infrasound from wind turbines. This presentation should also include a discussion of potential impacts associated with meteorological conditions that lead to amplitude modulation of sound waves emitted from turbines. The application should also examine reports from governmental bodies including the World Health Organization (1999, 2009) and NARUC (2011, 2012). DOH requests tabular noise modeling results inclusive of annual maximum daytime (L16max,day), annual maximum night (L8max,night) and annual logarithmic average nighttime (Leqnight) noise levels that can be directly compared to these guidelines for both participating and non-participating receptors (including seasonal) to evaluate potential sleep | |

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| | | | disturbance and annoyance.<br><br>Finally, Exhibit 15 of the application should include any necessary cross-references to other exhibits (and visa-versa) for information related to the methods and analyses that support the requirements for 16 NYCRR § 1001.15. Please modify the PSS accordingly. | |
| **62.** | DOH p. 2-3 | Noise and Vibration | Exhibit 19: Noise and Vibration<br><br>The PSS indicates that the application will include a map of all potential sound receptors within one-mile of proposed wind turbines and the substation. The list of receptors evaluated should include any hospitals and medical facilities in the study area. The PSS indicates that receptors will be identified via aerial photography, windshield surveys and consultation with local officials. We note that tax records may serve as another source of information (e.g., for seasonal residences).<br><br>In addition to a map of predicted noise impacts and the noise descriptors required by 16 NYCRR § 1001.19, DOH requests tabular noise modeling results inclusive of annual maximum daytime (L16max,day), annual maximum night (L8max,night) and annual logarithmic average nighttime (Leqnight) noise levels that can be directly compared to WHO guidelines for both participating and non-participating | See Response to Comment 3.<br><br>Exhibit 19 of the Application will discuss potential for actual 8-hour and 16-hour noise levels to exceed the ESLs calculated using the methods recommended in the NARUC guidelines. Exhibit 19 will also identify sources of error and variation that could cause measured annual average $Leq_{night}$ values to differ from those predicted in the application.<br><br>The maximum noise levels that ACWE has committed to calculate in PSS item 19.2 (the PSS refers to these as “ESLs” and states they will be calculated in accordance with NARUC guidelines) will be presented as requested and will include predicted L16max, day and L8max, night values. In its Application, ACWE will explain that the ESLs serve as predictors for L16max, day and L8max, night. ACWE will perform additional modeling to predict an $Leq_{night}$ for every noise receptor and it will report these results in Exhibit 19.<br><br>ACWE will evaluate potential interference with the use of outdoor public spaces by comparing predicted Project noise levels to 1974 EPA recommendations on levels to avoid impacting outdoor speech.<br><br>ACWE will evaluate the potential for interference with technical and industrial activities |

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| | | | receptors (including seasonal use receptors) to evaluate potential sleep disturbance and annoyance. DOH also is concerned that noise modeling methods based on Hessler's method as described in NARUC, 2011 (i.e., based on ISO 9613-2) will not result in Expected Sound Levels that are comparable in timeframe (e.g., 8-hour, 16-hour, annual logarithmic average of night-time hours) to the aforementioned health-based WHO noise guidelines (1999, 2009). We are also concerned that disregarding annual meteorological conditions (which would be considered on CONCAWE corrections) could compromise the accuracy of modeled noise levels for the study area.<br><br>Additionally, based on our review of the information in the PSS, it appears that some of the noise descriptors required by 16 NYCRR § 1001.19 are not presented. Specifically, 19(f)(4), 19(f)(5), and 19(f)(9) are not described in a manner consistent with the regulation. Additionally, because of the lack of detail in the PSS, Department staff were unable to evaluate full compliance with 16 NYCRR § 1001.19(i-m). For 16 NYCRR § 1001.19(k), the PSS did not present how the studies supporting Exhibit 19 will address interference in the use of outdoor public facilities and areas, potential for structural damage, and the potential for interference with technical, industrial or medical activities that are sensitive to vibration (airborne and ground-borne) or infrasound. Please modify the PSS accordingly. | by comparing the Project to results of a Scottish study considering possible impacts to a Comprehensive Nuclear Test Ban Treaty Organization monitoring site.<br><br>ACWE plans to comply with the identified regulations using the understanding Invenergy has gained from preparing applications in Cases 15-F-0377 (Bull Run Wind) and 16-F-0328 (Number Three Wind), and from reviewing documents in Case 14-F-0490 (Cassadaga Wind). It will update its PSS to further specify methods it plans to use to meet these requirements. |
| **63.** | DOH p. 3 | Geology, Seismology and Soils | Exhibit 21: Geology, Seismology and Soils | The Application will provide the assessment required by §§ 1001.21(j) and 1001.23(a)(3) of potential impacts of blasting on wells and other below ground |

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| | | | 16 NYCRR § 1001.21(j) requires the application to include an assessment of potential impacts of blasting to environmental features, above- and below-ground structures, including pipelines and wells. Although the PSS indicates that locations of gas pipelines will be identified, that is not the case with the location of wells (including abandoned wells). Also, in addition to the location of these below-ground features to be identified, the application should also include an impact assessment on those features. Please modify the PSS accordingly. | features. The Application will map known well locations from publicly available sources and other public water supply sources along with WTG, roads, and ECS routes, and will discuss the separation required between drinking water sources and construction activities like HDD and blasting. |
| **64.** | DOH p. 3 | Water Resources and Aquatic Ecology | Exhibit 23: Water Resources and Aquatic Ecology<br>Although the PSS indicates that Exhibit 23 will present the information required by 16 NYCRR § 1001.23, there is no discussion of any planned analyses and evaluation of potential impacts during construction and operation on public and community drinking water supplies/intakes, including groundwater and surface water sources. Information pertaining to public water systems for the study area can be requested via Freedom of Information of the DOH Records Access Office (see: https://www.health.ny.gov/regulations/foil/). Please update the PSS accordingly. | ACWE's Application will show locations of wells and public water sources based on publicly available information including information obtained from NYS DEC and DOH. The suggested FOIL request was made on February 7, 2018. |
| **65.** | DOH p. 3 | Visual Impacts | Exhibit 24: Visual Impacts<br>This section indicates that the application will include a visual impact assessment as required by 16 NYCRR § 1001.24. The PSS does not specify whether the receptors | The shadow analysis will use the same receptors as used for the noise study. However, the Visual Impacts Assessment (VIA) will not be performed in the same way the Noise Impact Assessment will be performed. The VIA will include maps from which the visibility of WTGs from the identified noise receptors can be gleaned. |

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| | | | evaluated will overlap with those identified for the noise impact assessment. We suggest that the application consider the same receptors.<br><br>Additionally, 16 NYCRR § 1001.24 requires that the VIA include an analysis and description of facility operational effects, including shadow flicker. If the shadow flicker analysis will not be presented in Exhibit 24, this section of the PSS and application should refer to Exhibit 15 for the evaluation of potential short-term and long-term health impacts, including annoyance and photosensitive epilepsy potential, associated with shadow flicker. NARUC (2012) "Wind Energy & Wind Park Siting and Zoning Best Practices and Guidance for States" includes both short- and long- term flicker guidelines. Please update the PSS accordingly. | The application will discuss potential health impacts of shadow flicker, and it will compare shadow flicker results to the annual and daily recommendations in the NARUC guidelines. |
| **66.** | DOH p. 4 | Effect on Transportation | Exhibit 24: Effect on Transportation<br><br>Although the PSS indicates that Exhibit 24 will present the information required by 16 NYCRR § 1001.24, the Department also requests that the applicant explore the potential for increased traffic accidents associated with construction of the project and describe mitigative approaches to reducing any increased hazards. Please update the PSS accordingly. | The Application will include data on existing traffic volumes and accidents on area roads, predicted increases in traffic volumes during construction and operation and estimates of the potential for increased accidents using standard procedures. |
| **67.** | DOH p. 4 | Effect on Communication | Exhibit 26: Effect on Communication<br><br>Although the PSS indicates that Exhibit 26 will present the information required by 16 NYCRR § 1001.26, we request | ACWE will confer with Project Area emergency responders and request information on communication systems they use in the Project Area, including any microwave paths that may be used to transfer information to broadcast towers. The Application will map |

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| | | | that the PSS be revised to indicate that the application will evaluate any potential impacts associated with communications for local emergency services. Please consult with the Steuben County Office of Emergency Services and the Steuben County Sherriff's Office as part of this evaluation. Additionally, please include an evaluation of potential project impacts data on communication for the NYS Mesonet system (see: http://www.nysmesonet.org/), which is a resource for emergency response. | microwave paths used by emergency responders and evaluate potential for the Project to impact emergency responder communications. |
| **68.** | DOH p. 4 | Environmental Justice | Exhibit 28: Environmental Justice<br>In addition to the information presented in the PSS pertaining to the identification of potential environmental justice areas, we request that the applicant include a map as part of the presentation of this information. Please update the PSS accordingly. | Environmental justice areas were identified in the PIP, ACWE will update its PSS to include a map of these areas. |
| **69.** | DOH p. 4 | Electric and Magnetic Fields | Exhibit 35: Electric and Magnetic Fields<br>Although the PSS indicates that Exhibit 35 will include the information required by 16 NYCRR § 1001.35, the PSS does not provide any specifics as to whether the calculation tables and field strengths graphs for the right-of-way segment cross-sections will meet all the proscriptive requirements in 16 NYCRR § 1001.35(d)(1)-(6). Please update the PSS accordingly. | The Application will include an Electromagnetic Field Study that complies with § 1001.35(d)(1)-(6), but note that (a) due to the nature of wind production, ACWE does not expect the average annual load on the line ten (10) years after the Project's in-service date to differ materially from the initial load and (b) as stated in the PSS p. 26, the information required by § 1001.35(d)(6) will be limited to locations where existing lines at 115 kV or greater are crossed or paralleled. |

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| | **NYS Dept. of Transportation 1/26/18** | | | |
| **70.** | DOT p. 1 | DOT Permits | • Landscape Architecture/Environmental Group- The Department shall be sent a copy of any permit required for Impacts to a regulated resource within State Highway Boundary.<br>• Office of Real Estate - Any crossings for power/communications will be subject to a Highway Work Permit and a Use & Occupancy permit.<br>Any work (including access or utility work) within the right of way of any State Highway will require a Highway Work Permit from the Department's Traffic and Safety and Mobility Office. Also, any such work will require coordination with the Department's planned maintenance and/or capital improvements through our Wyoming County Maintenance Office. Occupancy of any state-owned property (short or long term) may require a Permit for Use of State-Owned Property from the Department's Right-of-Way Office.<br>As a permitting agency under SEQRA, the Department should be given the opportunity to review any site plans, environmental impact statements, traffic studies, or drainage plans prior to approval to assure that the negative impacts on State facilities are mitigated as appropriate.<br>The State Smart Growth Public Infrastructure Policy Act, | • ACWE acknowledges DOT's permitting requirements and will ask the Siting Board to also acknowledge their applicability. |

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| | | | found in Section 6 of the Environmental Law, obliges the New York State Department of Transportation to evaluate projects it approves, undertakes, supports, or finances against the enumerated smart growth criteria. It is our expectation that a Smart Growth Checklist and attestation may be required prior to the issuance of either a Highway Work Permit or a Permit for Use of State Owned Property. | • The Project is subject to Public Service Law Article 10 and 16 NYCRR Part 1001, and not to State Environmental Quality Review Act. DOT may seek party status in the Article 10 process to ensure its views are accounted for and can review all materials that will be posted on the Department of Public Service Document and Matter Management (DMM) site, including the information required by 16 NYCRR § 1001.25(a)−(d).<br>ACWE will include the Smart Growth checklist in its Article 10 Application. *See* 16 NYCRR 1001.27(l). |
| | **NYS DPS 3/5/18** | | | |
| **71.** | DPS p. 1 | General Comment 1 | 1. The Applicant must correct the DMM case number in the header of the PSS document from 16-F-0282 to 17-F-0282. | Comment noted |
| **72.** | DPS p. 1 | General Comment 2 | 2. The Application should provide a list of acronyms used throughout the Application as an Appendix to the Table of Contents. | ACWE concurs. |
| **73.** | DPS p. 1 | General Comment 3 | 3. In addition to the specific comments below, DPS Staff advises that the Application must also contain the informational requirements included in 16 NYCRR §1001. | The regulations contained in 16 NYCRR Part 1001 prescribe the information and analyses that are to be included in an Application under Public Service Law section 164. To the extent DPS's specific comments enlarge upon the requirements of Part 1001, ACWE will include in the Application such responsive information that is relevant and material to the issues and reasonably likely to assist the Siting Board in making the findings required by Public Service Law section 168. |
| **74.** | DPS p. 1 | General Comment 4 | 4. The Applicant should provide a matrix during the remainder of the scoping and stipulations processes cross-referencing where issues, comments, and information | ACWE will include the requested matrix in Exhibit 1 of the Application. |

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| | | | required per 16 NYCRR §1001, or otherwise requested by parties to the case, are addressed in multiple exhibits. | |
| **75.** | DPS p. 1 | General Comment 5 | 5. GIS shapefiles of the Project Area, preliminary facilities locations, and related resource information should be provided to DPS Staff for review during the scoping and stipulations processes. | GIS shapefiles depicting preliminary locations of access roads and turbines will be provided to DPS during scoping. Detailed GIS shape files will be provided directly to DPS when the Application is filed. |
| **76.** | DPS p. 1 | General Comment 6 | 6. DPS Staff requests that GIS shapefiles of Project component and site locations, property lines, environmental data, visual and cultural resource locations, and related analyses derived from such data and utilized in development of the Application and mapping be provided directly to DPS Staff at the time the Application is filed. | See response to Comment #5. |
| **77.** | DPS p. 1 | General Comment 7 | 7. The discussion of which of the 108 potential locations for wind turbines and access roads will be selected does not address consideration of adverse impact avoidance or minimization. DPS Staff advises that these are among the primary considerations that Article 10 specifically requires be addressed in Siting Board decisions. | The Application will include only locations on which the Applicant concludes turbines can be acceptably sited under the Article 10 standards. The number of potential turbine sites will be no greater than 108 and the maximum number of those actually used may be fewer, as discussed in the PSS. The factors discussed on p. 2 to be considered in selecting the final number of sites will be considered only after concluding that the locations do not pose adverse impacts that cannot be avoided or minimized. |
| **78.** | DPS p. 1 | PSS Cover Letter / Proof of Service Comment 1 | 1. The January 22, 2018 Affidavit of Service filed with the PSS indicated that copies of the PSS were provided to the Town Supervisors and Town Clerks of the host communities. However, it is not clear that one set of documents were intended for the repositories located within the town halls. The Applicant should clarify that the town | ACWE has confirmed that copies are available for public review at each Town hall. The PSS is, and the Updated PSS will be, posted on the Project website and that will be noted in the filing letter. |

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| | | | halls have a full set of the revised PSS documents available for public review. In addition, the cover letter should note that an electronic copy of the PSS is available on the Project website. | |
| **79.** | DPS p. 2 | PSS Cover Letter / Proof of Service Comment 2 | 2. In the December 27, 2017 filing, the Applicant indicated that it was notifying "local municipalities and other stakeholders" by mail of the availability of the PSS. The Applicant did not include a distribution list and proof that notice was served to stakeholders, including those identified in the Public Involvement Program Plan (PIP) and through outreach activities, as well as host and adjacent landowners. | The list of addressees who were sent copies of the PSS filing notice will be filed with the DPS's RAO with a request to respect the privacy interests of the stakeholders pursuant to 16 NYCRR Subpart 6-2. |
| **80.** | DPS p. 2 | PSS Cover Letter / Proof of Service Comment 3 | 3. In the January 22, 2018 revised filing, the Applicant noted that it published the notice of the PSS filing in the Arcade Herald. DPS Staff recommends that several daily and weekly community newspapers with circulation in the Project and Study Areas be used for future notifications regarding Project filings. Staff recommends the following identified publications: The Salamanca Press and Olean Times Herald -- Rushford, Allegany County and The Daily News -- Wyoming County. | ACWE will publish future notices in *The Olean Times Herald* and *The Daily News-Wyoming County* as suggested. The *Salamanca Press* does not cover the Project Area. |
| **81.** | DPS p. 2 | PSS Cover Letter / Proof of Service 4 | 4. According to the Public Involvement Program Plan (PIP), the Town of Sardinia and Town of Cuba fall within the Study Area. Therefore, both municipalities should be added to the Stakeholders List. In addition, both municipalities | The Town of Cuba is on the Project's stakeholder list; Sardinia will be added. |

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| | | | should have been provided a notice of the PSS filing. | |
| **82.** | DPS p. 2 | PSS Cover Letter / Proof of Service 5 | 5. A repository should be added to the following:<br>a. Town of Sardinia - Hulbert Library of the Town of Concord; and<br>b. Town of Cuba - Cuba Circulatory Library. | ACWE will add the identified libraries to its repository list, although they are 15 and 13 miles distant from the Project Area. |
| **83.** | DPS p. 2 | FACILITY DESCRIPTION Project Configuration and Layout Comment 1 | PSS Section III. FACILITY DESCRIPTION<br>1. Project Configuration and Layout – In the first paragraph, the description should include the counties associated with each town. | Updated PSS will include each Town's county. |
| **84.** | DPS p. 2 | Facility Description Comment 2 | 2. The third paragraph should indicate the location of the Substation in relation to the new 345-kV switchyard and a brief description of the general route and length of the proposed 345-kV line. | Updated PSS will include the requested information. |
| **85.** | DPS p. 2 | Facility Description Comment 3 | 3. The use of the terms "Project" and "Facilities" should be clarified and used consistently in the PSS and the pending Application.<br>a. The PSS suggests that the Project includes both the Wind Farm facilities and the transmission line interconnection facilities (PSS p. 2); the transmission line interconnection facilities will not be Article 10 facilities (PSS p. 2); and the "Project Area" only includes the generating facilities layout, which the Study Area is based upon (PSS | The Updated PSS will so clarify; ACWE concurs with DPS's suggested delineation. |

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| | | | p. 2 and Figure 1). | |
| **86.** | DPS p. 2-3 | Facility Description Comment 4 | 4. The preliminary Project layout (presumably "Figure 2") does not indicate any turbine or access road facilities in the Town of Yorkshire, Cattaraugus County. It is not clear why the Wind Farm Project extends west into the Town of Yorkshire. DPS Staff requests clarification as to the extent of and location of facilities within Yorkshire, and whether those facilities are components of the proposed Article 10 electrical generating facilities or are associated with the related Article VII transmission line facilities. If they only include Article VII facilities, Yorkshire should be removed from the Wind Farm Project Area. | Yorkshire will host only Article VII facilities. In previous consultations with DPS staff Invenergy has been advised to include those areas within the Project Area. |
| **87.** | DPS p. 3 | Facility Description Comment 5 | 5. The PSS does not identify the proposed location of the Project Substation. Since the PSS indicates there will be an Article VII 345-kV transmission line, and the only location where the Project Area mapping extends to the location of National Grid's Stolle Road transmission line is in the Town of Yorkshire, DPS Staff surmises that Yorkshire and Cattaraugus County are potentially not directly included in the Article 10 Project Area. Siting Board Ad Hoc nominees and eligibility for Intervenor Funding for the Article 10 Project depends on the extent of the Generating Facilities' location, and do not include Article VII facilities. This issue must be clarified as soon as possible. | See response to previous comment. |
| **88.** | DPS p. 3 | Potentially Significant Adverse Impacts of the | PSS Section V. POTENTIALLY SIGNIFICANT ADVERSE | The Updated PSS will clarify that there will be one unified complaint handling |

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| | | Project | IMPACTS OF THE PROJECT<br>1. The Applicant refers to the handling of complaints in the sections on noise and shadow flicker. It should be clarified whether these are separate procedures for different impacts associated with the Project or whether there will be one set of procedures to resolve all complaints. These sections should reference where the complaint resolution plan or plan(s) will be in the Application. See Exhibit 12 for additional Staff comments regarding complaint handling procedures. | procedure, which will be detailed in Exhibit 19, Appendix 19m. |
| **89.** | DPS p. 3 | Material Issues Raised to Date | PSS Section VII. MATERIAL ISSUES RAISED TO DATE<br>1. A copy of the most recent PIP meeting log should be included as an appendix to the PSS. In addition to the dates and locations of stakeholder meetings, the log should document the various concerns and issues raised during the public involvement events, along with the Applicant's responses. | The Updated PSS will include the most recent log with information requested; see PSS Section VII for a description of the issues raised to date. |
| **90.** | DPS p. 3 | General Requirements | Exhibit 1. General Requirements<br>1. DPS Staff notes that this section should include the names and e-mail addresses of the local representatives and the toll-free telephone number established for the Project. This information should be provided wherever the public contact information is noted throughout the filing, including the public notices. | ACWE concurs. |

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| **91.** | DPS p. 4 | Overview and Public Involvement Comment 1 | Exhibit 2. Overview and Public Involvement<br>1. The Applicant states that Section 2(a) will include a discussion of the types of turbines under consideration for use in the Project. This description should include a brief discussion on the number of turbines that will be used in the Project and a description of related facilities (access roads, location of substation and O&M building, etc.). | ACWE concurs. |
| **92.** | DPS p. 4 | Overview and Public Involvement Comment 2 | 2. According to the Applicant, Section 2(c) will describe the open houses and list issues the Applicant learned of while implementing the PIP. The description of the open house events should discuss how and when stakeholders and the public were notified about the events. Copies of the event notice/invitations and distribution lists should be included as an attachment. In addition, the issues and/or concerns raised at the public events and stakeholder meetings should be documented in the Meeting Log (see comment above). Section 2(c) must summarize any changes to the Project as a result of public input. | Exhibit 2 will include the requested information. See also, PSS, Section VII. |
| **93.** | DPS p. 4 | Overview and Public Involvement Comment 3 | 3. In addition to describing the open houses and issues raised, this exhibit should discuss the components of the PIP Plan that the Applicant has conducted to date, such as launching a project website, disseminating copies of materials to local repositories, establishing representatives and local telephone numbers in the Project Areas, etc. DPS Staff recommends that the Applicant describe public involvement activities regarding the filing of the Project Application. At a minimum, the Applicant should mail notice | ACWE concurs; see also Response to Comments 9 - 12. |

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| | | | of the Application submittal to a project mailing list comprised of the updated Stakeholders List, including host and adjacent landowners, and additional addresses received through public outreach. The notice should include information on the Project generally and the Article 10 Application specifically. A copy of the mailing list and documentation indicating the dates and mailings that were made should be provided to the Secretary. The Application should include the updated Stakeholder List. | |
| **94.** | DPS p. 4 | Location of Facilities Comment 1 | Exhibit 3. Location of Facilities<br>16 NYCRR §1001.3 – Location of Facilities<br>1. See General Comments above Re: PSS Section III. Facility Description. | See Response to Comments 13 - 17. |
| **95.** | DPS p. 4 | Location of Facilities Comment 2 | 2. Attached Figure 2 of the PSS shows a preliminary layout of the wind turbines and access roads. However, other major features are not shown on this map. DPS advises that a revised Figure 2 be submitted, as part of the response to PSS comments, showing the following additional features:<br>a. Project substation;<br>b. Point of interconnection station; and<br>c. Proposed and any existing meteorological towers. | Attached find an up-to-date Figure 2 with the met tower locations depicted. The Project Substation and POI switchyard locations have not yet been identified. |
| **96.** | DPS p. 5 | Proposed Location of Major Electric | 16 NYCRR §1001.3(a) – Proposed Location of Major | ACWE concurs. |

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| | | Generation Facility | Electric Generation Facility<br>1. Section 3, Number 1, on p. 12 of the PSS: It is noted that 3.a.1 will provide an overall project layout map. DPS requests that the Application Location mapping be based on the latest edition (generally 2016 or 2017 for New York State) USGS topographic mapping. | |
| **97.** | DPS p. 5 | Land Use Comment 1 | Exhibit 4. Land Use<br>16 NYCRR §1001.4(a) – Map Showing Existing Land Uses<br>1. Section 4, Number 1 on p. 13 of the PSS: "Land cover" mapping is not a suitable surrogate for "Land Use" mapping. For example, consider that "forest land" cover mapping does not distinguish between a forested park or nature preserve, a sugar maple "sugarbush", a forested residential property, a public water supply watershed, or industrial forest land. DPS requests the applicant to provide a more definitive proposal for Land Use mapping classifications. | The Applicant proposes depicting existing Study Area land uses using the three-digit classification codes of the New York Office of Real Property Services (NYSORPS), which are included in parcel data obtained from county offices. To the extent the Facility Site includes "vacant land" classifications, the Applicant will provide additional information on the existing use of such land based on review of recent aerial imagery or discussions with the respective landowner. |
| **98.** | DPS p. 5 | Land Use Comment 2 | 2. Existing utility and transmission facilities land uses should be acknowledged as important primary or secondary land uses presenting some limitations on other uses. | To the extent that this information is publicly or available, mapping used for Exhibit 4 will identify such uses. |
| **99.** | DPS p. 5 | Wind Power Facilities<br>Setback Requirements and/or Setback | Exhibit 6. Wind Power Facilities<br>16 NYCRR §1001.6(a) – Setback Requirements and/or Setback Recommendations | ACWE concurs. Exhibit 31 will identify the setback requirements of each local law and how the relevant terms are defined. Exhibit 6 will differentiate among the setbacks in each locality. |

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| | | Recommendations Comment 1 | 1. DPS Staff advises that definitions of terminology should be clearly defined for each municipality and considered in Facility design and development of the Application. Definitions of "structures" and "buildings" and other terms are likely to vary among municipal codes. | |
| **100.** | DPS p. 5 | Wind Power Facilities<br><br>Setback Requirements and/or Setback Recommendations Comment 2 | 2. If setback and height requirements vary by involved municipality, DPS Staff recommends that the Applicant adopt the most restrictive regulations or develop uniform setback and height standards (that conform with all involved municipalities) for the entire Project. | Article 10 requires compliance with applicable local laws (unless overridden); it does not require uniformity. ACWE will propose a Project-wide table of setbacks but reserves the right to vary them among localities if required to achieve the Project's purpose while complying with applicable local laws. |
| **101.** | DPS p. 5 | Wind Power Facilities<br><br>Setback Requirements and/or Setback Recommendations Comment 2 | 3. Table X-1 on p. 9 of the PSS provides information regarding wind energy laws in the Project towns. A similar table should be provided in this section of the Application. However, DPS Staff advises that this table be expanded to include features shown on DPS Attachment 1, Setback Table. DPS Attachment 1, Setback Table contains a list of features that DPS Staff recommends should be included for identifying required or recommended setback and height limits of the towns, the Applicant, and the manufacturer. | ACWE concurs. The Table included in Exhibit 6 of the Application will include the requested information. |
| **102.** | DPS p. 5-6 | Degree the Facility Layout Accommodates Turbine Setbacks/Recommendations | 16 NYCRR §1001.6(b) – Degree the Facility Layout Accommodates Turbine Setbacks/Recommendations<br><br>1. Regarding setbacks of wind energy facilities from electric transmission lines, Table X-1 lists requirements of 500 feet, 500 feet, and 1.2 times the maximum blade tip height for the Towns of Centerville, Freedom, and Farmersville, | Comment noted. Table X-1 reports only on the requirements included in local laws. ACWE believes further discussion and evidence is warranted concerning wind turbine setbacks and risk to transmission lines. |

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| | | | respectively. The Applicant should take note that in past cases, the Siting Board has ordered a standard setback distance of 1.5 times maximum blade tip height from major transmission facilities. See, Case 07-E-0213, Sheldon Energy LLC, Order Granting Certification of Public Convenience and Necessity and Providing for Lightened Regulation (issued January 17, 2008). Turbine setback distance from transmission lines should apply to the Project proposed collector substation and transmission interconnection line, also.<br><br>2. Section 6.b.i: Turbine setback distance from transmission lines should also apply to the Project proposed collector substation and transmission interconnection line. | |
| **103.** | DPS p. 6 | Third-Party Review and Certification of Wind Turbines<br>Comment 1 | 16 NYCRR §1001.6(c) – Third-Party Review and Certification of Wind Turbines<br><br>1. DPS Staff recommends that a table be provided in the Application showing wind turbine classes with corresponding turbulence levels (e.g., International Electrotechnical Commission (IEC) class IB, etc.) that are suitable for use in the Project Area. The table should include the following wind regime factors: weather extremes, average wind speed, wind gusts, and turbulence intensity. | Exhibit 6 will include the requested table available from industry sources and will add requested data, if available from the manufacturers, to Table 2 a. 1. |
| **104.** | DPS p. 6 | Third-Party Review and Certification of Wind Turbines | 2. Regarding third-party certification, DPS Staff advises that the Applicant should provide, in the PSS response | ACWE plans to use wind turbines that meet requirements of Invenergy and its experienced, commercial-scale investors in wind projects. These requirements do not |

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| | | Comment 2 | comments, a statement that wind turbine certification will be in accordance with IEC 61400. | necessarily include endorsement by a third-party vendor selling certification services. |
| **105.** | DPS p. 6 | Electric System Production Modelling | Exhibit 8. Electric System Production Modelling<br>1. The Applicant should contact Craig Bury at (518) 474-2033 to discuss the choice of Production Simulation Software, database assumptions, study time period, and other relevant factors related to this section. | ACWE will schedule a call to discuss the software and assumptions to be used in the production modeling. |
| **106.** | DPS p. 6 | Alternatives | Exhibit 9. Alternatives<br>1. The PSS discussion of which of the 141 potential locations for wind turbines and access roads will be selected does not address consideration of adverse impact avoidance or minimization. These are among the primary considerations that Article 10 specifically requires be addressed in Siting Board decisions. Alternative facility design, layout arrangement and technologies to demonstrate avoidance, minimization and mitigation of significant adverse impacts should be addressed in this Exhibit. | This Comment appears to have been duplicated from the Canisteo PSS Comments (Case 16-F-0205). The Application will include only locations on which the Applicant concludes turbines can be acceptably sited under the Article 10 standards. The number of potential turbine sites will be no greater than 108 and the number of those actually used may be fewer, as discussed in the PSS. The factors discussed on p. 2 to be considered in selecting the final number of sites will be considered only after concluding that the locations do not pose adverse impacts that cannot be avoided or minimized. |
| **107.** | DPS p. 7 | Preliminary Design Drawings Comment 1 | 16 NYCRR §1001.11 – Preliminary Design Drawings<br>1. DPS Staff will request that four full size printed copies of the preliminary drawing set be provided when the Application is submitted along with a flash drive containing electronic AutoCAD files. | ACWE will provide four full sized printed copies of the preliminary drawing set. Due to the complexity and the potential versioning issues with AutoCAD Civil 3D, all digital files for this project will be restricted to GIS compatible files. |

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| **108.** | DPS p. 7 | Preliminary Design Drawings Comment 2 | 2. In general, scales proposed in the PSS for various required drawings appear to be acceptable to DPS Staff. It is recommended that the Applicant verify that it agrees with the information presented in Attachment 2, Map Sizes and Scales. This document contains noted wind farm drawings and includes entries for extent limits, engineering scales, and proposed paper sizes of each listed corresponding drawing. DPS Staff has included scale information listed in the PSS, along with more information pertaining to other required drawings that will be submitted with the Application. | ACWE has reviewed Attachment 2 to DPS's comments and will provide detailed comments during scoping. |
| **109.** | DPS p. 7 | Preliminary Design Drawings Comment 3 | 3. Preliminary Site Plans - CAD drawings should show all FEMA Flood Hazard Areas, not only the "100-year flood zones" as stated on p. 17. Flood hazard areas, floodways, and designated flood hazard elevations should be indicated on the Site Plan and profile figures. | The Preliminary Site Plans will include overview sheets that show the project components (i.e., turbines, access roads, collection lines, etc.) in relation to FEMA Flood Hazard Areas as publicly available for the area. |
| **110.** | DPS p. 7-8 | Site Plan | 16 NYCRR §1001.11(a) – Site Plan<br>1. Pages 16-17 of the PSS lists permanent facilities and construction information to be shown on preliminary Site Plans per regulation 1001.11(a). In addition to these items, DPS Staff advises that the following features also be presented on the Site Plans:<br>a. Electric collection lines – the required number of circuits for each collection line route should be indicated and overhead and underground cable routes should be differentiated with specific line-types; | a. The site plans will show lines for each ECS circuit. |

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| **111.** | DPS p. 7-8 | Site Plan | b. Proposed grading (permanent grading and temporary grading for construction activities); | b. ACWE proposes to show typical grading requirements for access roads and crane assembly areas. It also plans to show limits of disturbance that will account for any expected cut and fill. But it does not propose submitting detail grading contours for every access road and crane site for both permanent and temporary conditions. |
| **112.** | DPS p. 7-8 | Site Plan | c. Clearing limits for all Project components (turbines, access roads, buildings, electric lines, etc.) based on construction limit assumptions; | c. In any wooded areas, the limit of disturbance shown on the site plans will also serve as clearing limits. |
| **113.** | DPS p. 7-8 | Site Plan | d. Indication of permanent Right-of-Way (ROW) for all electric cable installations; | d. In general, ACWE leases land where it installs buried cables, and these leases do not specify a set ROW. As such, it's inappropriate to show a ROW on the site plans. For buried cable corridors, the site plans will show the limits of disturbance expected to be necessary for cable installation. |
| **114.** | DPS p. 7-8 | Site Plan | e. An illustration of the various setbacks from each turbine to other features based on the Applicant's proposed setbacks and local laws and ordinances (including all setback requirements listed in the table to be provided in the Application as described above in section 6(a)(3) of this document). A stand-alone turbine setback layout plan may be submitted instead of incorporating this information in the Site Plans to improve clarity of information; | e. The details on site plans make them difficult for also presenting setback information. ACWE will either add setback circles to the Exhibit 4 map that will show tax parcels, landowners, and turbines or in a stand-alone setback map. |
| **115.** | DPS p. 7-8 | Site Plan | f. The outline of the Project substation shall include access way(s), property setbacks, and fence-line(s); | f. The Project Substation site plan will show access roads, fences, and any applicable setbacks. |
| **116.** | DPS p. 7-8 | Site Plan | g. The O&M building outline should include any proposed utility connections including septic system(s), water supply | g. The O&M Building site plan will show likely locations for septic systems, water connections, access roads, parking, and setbacks. |

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| | | | system(s), etc., access way(s), property setbacks, and parking area(s); | |
| **117.** | DPS p. 7-8 | Site Plan | h. Laydown, staging, and equipment areas shall include associated access ways and parking areas; | h. The laydown yard site plan will show access drives and parking areas. |
| **118.** | DPS p. 7-8 | Site Plan | i. POI switchyard outline should include access way(s), property setbacks, and fence-line(s); | i. The POI Switchyard site plan will show access roads, fences, and any applicable setbacks. |
| **119.** | DPS p. 7-8 | Site Plan | j. Outline of concrete batch plant (if necessary), including access way(s), property setbacks, and parking areas; | j. The concrete batch plant site plan will show access roads, fences, and any applicable setbacks. |
| **120.** | DPS p. 7-8 | Site Plan | k. Permanent meteorological towers; | k. The site plans will show proposed locations for permanent met towers. |
| **121.** | DPS p. 7-8 | Site Plan | l. Back-up generators and fuel storage areas; and | l. The site plans for the electric yards, laydown yards, and O&M building will show locations for back-up generators and fuel storage. |
| **122.** | DPS p. 7-8 | Site Plan | m. Location of existing facilities and easements for existing utilities, gas wells, and gas transmission pipelines and any above-ground appurtenances, in relation to proposed Project facilities (turbines, electric lines and substation, access roads, laydown yards, met towers, O&M facility, and any associated fences). | m. The site plans will show locations of gas pipelines and related infrastructure. They will also show locations of residences and regularly occupied structures. |
| **123.** | DPS p. 8 | Landscaping Plan | 16 NYCRR §1001.11(d) – Landscaping Plan<br>1. Plans should show any proposed landscaping or site design at O&M building(s), permanent storage yards, and | Based on the proposed Project layout and the results of various analyses, the Application will discuss the need for landscaping in the form of visual screening, and will present conceptual screening plans if needed. |

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| | | | the collector substation, as appropriate to the site, as well as for any individual visual receptor locations that warrant screening, such as historic properties or public parks. | |
| **124.** | DPS p. 8 | Architectural Drawings and Exterior Elevations | 16 NYCRR §1001.11(f) – Architectural Drawings and Exterior Elevations<br><br>1. Preliminary substation and O&M building information should specify typical or planned heights, finish materials and colors for buildings, walls and/or fences. | ACWE concurs. |
| **125.** | DPS p. 9 | Typical Design Detail Drawings | 16 NYCRR §1001.11(g) – Typical Design Detail Drawings<br><br>1. Pages 17 through 18 of the PSS provide information for typical details of access roads, underground electric cable installations, and other features to be presented as part of the Application. In addition to these listed details, DPS Staff advises that the following typical details be provided in the Application:<br><br>a. Typical wind turbine foundation plans including an elevation plan, section, and details. The details should depict the type of foundation (spread footing, etc.), reinforcement layout, and general details and arrangements of flange assembly and the embedment ring. Information regarding design codes shall be presented with these plans along with data pertaining to steel and concrete (compressive strength, volume, weight, etc.) to be used for turbine foundations;<br><br>b. Elevation and details of overhead collection lines | ACWE concurs. |

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| | | | including height above ground, structure layouts, clearing width limits for construction and operation of the Facility, permanent ROW widths, average span lengths for layouts, and structure separation requirements (for installations containing more than one pole, etc.) for all single and multiple-circuit overhead layouts;<br><br>c. Typical details associated with any proposed horizontal directional drilling (HDD) installations. Details shall include typical layouts of staging areas, bore pits, and general equipment positioning; and<br><br>d. Details and descriptions of any protective measures (if any) for Facility components within or adjacent to "Flood Zones" should be included in the Application. If this information is not available during Application filing, a description of potential measures to be utilized shall be included. | |
| **126.** | DPS p. 9 | Construction Comment 1 | Exhibit 12. Construction<br><br>16 NYCRR §1001.12(c) – Interference with Existing Transmission and Distribution Systems<br><br>1. Pursuant to 16 NYCRR §1001.12(c), DPS Staff recommends that the Application include preliminary plans and descriptions indicating design and construction controls to avoid interference with existing pipelines and other utilities and details of potential protective measures for any crossings of existing pipelines or other utilities. | ACWE concurs. The Application will identify locations where existing electric lines will be crossed by access roads that may require the existing lines to be temporarily moved or placed on taller poles and intersections where existing lines may need to be relocated and will include a discussion of the clearances required. It will also identify the locations where pipeline crossings will occur and the precautions required by their operators for avoiding interference. |

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| **127.** | DPS p. 9-10 | Construction Comment 2 | 2. DPS Staff advises that any proposed co-location installations be detailed. A discussion of applicable co-location design criteria for typical separations of proposed facilities from existing pipelines and other utilities shall be included in the Application. Information should be provided regarding design and construction controls to avoid or minimize interference with pipelines or other existing utility systems as required by §1001.12(c). | ACWE concurs. |
| **128.** | DPS p. 10 | Construction Comment 3 | 3. In addition to what is required per 1001.12(c), DPS advises that the Application include results of consultations with utility owners and any utility owner criteria regarding proposed Facility crossings of or installations nearby existing utilities. It is recommended that the following specific criteria be presented in the Application:<br>a. Descriptions of potential studies to be performed (along with an indication of timing);<br>b. Specific separation requirements or recommendations of utility owners (including gas well and pipeline owners); and<br>c. Descriptions and typical details of any protective features to be installed at crossings of or nearby existing utilities. | ACWE will request utility and pipeline operators to provide their requirements for crossing or working near their facilities and include them in Exhibit 12, to the extent ACWE has received responses. |
| **129.** | DPS p. 10 | Complaint Response and Resolution Comment 1 | 16 NYCRR §1001.12(d) – Complaint Response and Resolution<br>1. The Complaint Resolution Plan should include steps for | The Application will include a single, comprehensive, uniform complaint handling procedure for the construction phase and a single, comprehensive, uniform plan for operation. They will be in Appendix 19.m and will be cross-referenced in one or more |

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| | | | informing the public about the complaint plan and the process to file a complaint (i.e. written, electronic and oral). The Plan should describe the complaint process from time of receipt, verification, resolution development, implementation and confirmation of resolution, including anticipated timeframes and actions the Applicant will take if the complaint remains unresolved after these steps are taken. The Plan should identify and include any procedures or protocols that may be unique to each phase of the project (e.g. construction, operation, decommissioning) or complaint type (e.g. noise, degraded television service). The Applicant will maintain a complaint log listing all complaints and resolutions during construction and operations of the Project and the Plan will include a procedure for review and transmittal of the complaint log to DPS Staff. | exhibits as needed. |
| **130.** | DPS p. 10 | Complaint Response and Resolution Comment 2 | 2. DPS Staff recommends that this section include a description of when the Applicant will communicate with Stakeholders about construction activities, schedule and applicable safety and security measures. | ACWE concurs. |
| **131.** | DPS p. 10 | Real Property<br><br>Real Property Rights for All Interconnections for the Facility | Exhibit 13. Real Property<br><br>16 NYCRR §1001.13(d) – Real Property Rights for All Interconnections for the Facility<br><br>1. This section should address linear co-locations of Facilities with other existing easements, as well as crossings of those easements. | ACWE concurs. |

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| **132.** | DPS p. 11 | Public Health and Safety Maps Comment 1 | Exhibit 15. Public Health and Safety<br>16 NYCRR §1001.15(f) – Public Health and Safety Maps<br>1. DPS Staff advises that public health and safety-related maps as described in 1001.15(f) shall be prepared using data from the NYS GIS Clearinghouse, FEMA, local municipalities, NYSDEC, NYSDOH, and the USGS, as well as local sources for emergency response resources, including, but not necessarily limited to the any Allegany, Cattaraugus, or Wyoming County GIS websites. | Comment noted. The Applicant will use the listed information sources. |
| **133.** | DPS p. 11 | Public Health and Safety Maps Comment 2 | 2. Shadow flicker impact avoidance and minimization should address additional measures including turbine siting to avoid or reduce exposure duration and operational controls to monitor and limit exposure durations. | ACWE concurs. |
| **134.** | DPS p. 11 | Safety and Security Comment 1 | Exhibit 18. Safety and Security<br>1. DPS Staff recommends identifying the first responders/emergency services that will be consulted during the development of the emergency action plan (EAP) and requests copies of the final plan. | ACWE concurs. |
| **135.** | DPS p. 11 | Safety and Security Comment 2 | 2. The EAP should identify specific protocols for notifying different members of the public (e.g. emergency responders, host and adjacent landowners, utilities, environmental agencies, etc.) in the event of an emergency. | ACWE concurs. |

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| **136.** | DPS p. 11 | Noise and Vibration Comment 1 | Exhibit 19. Noise and Vibration<br>1. DPS Staff has provided extensive comments related to the recommended scope, methodologies, and criteria for Exhibit 19 for multiple cases including cases 15-F-0377[2] and 16-F-0328.[3] This has included consultation meetings with the Applicant and its consultants. Many of those prior comments and discussions are also applicable to this Project but they are not reflected in the proposed PSS. | ACWE plans to submit an application that complies with the regulations and reflects discussions in the two referenced cases. ACWE will update its PSS to provide more specifics on its plans. |
| **137.** | DPS p. 11-12 | Noise and Vibration Comment 2 | 2. DPS Staff advises that consideration of recent NYS Siting Board determinations, as well as ALJ's recommended decisions for Case 14-F-0490,[4] should be reflected in proposed methodologies for addressing Exhibit 19. | ACWE concurs. It will update the PSS to reflect design goals based on the recent Siting Board decision, in order to streamline future discussions and submittals. |
| **138.** | DPS p. 12 | Noise and Vibration Comment 3 | 3. PSS Section V, Noise and Section XV, Exhibit 6, Application Contents, Wind Power Facilities: DPS Staff notes that the NYS State Siting Board recently imposed in Case 14-F-0490[5] the same limits and certificate conditions for all non-participating residences, regardless the length of | Comment noted. More discussion is warranted before applying noise limits for year-round residences to the wide range of seasonal residences found in the Project Area. |

[2] Case 15-F-0377, Application of Bull Run Energy LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct a Wind Energy Project.

[3] Case 16-F-0328, Application of Number Three Wind LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 for Construction of a Wind Project Located in Lewis County.

[4] Case 14-F-0490, Application of Cassadaga Wind LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct a Wind Energy Project.

[5] Case 14-F-0490, Application of Cassadaga Wind LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct a Wind Energy Project. Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions. (Certificate Conditions 70 at pg. 26-28 and 80 at pg. 35-36).

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| | | | its use in a year. (e.g., seasonal vs. year-round). | |
| **139.** | DPS p. 12 | Noise and Vibration Comment 4 | 4. PSS Section X, Local Laws and Table X-1: This section should be revised to provide details about the noise descriptors, time frame of evaluation, and other provisions from local regulations on noise. Copies of local regulations on noise should be forwarded to DPS for review with Applicant's response to PSS comments. | ACWE will revise PSS Table X-1 to include time descriptors for the local law requirements. Copies of local wind energy laws will be provided with the updated PSS. |
| **140.** | DPS p. 12 | Noise and Vibration Comment 5 | 5. PSS Section XV, Application Contents, Exhibit 4, Land Use: As required by 16 NYCRR §1001.19 Exhibit 4(i), "[t]he 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." See additional comments on "short-term" and "long-term" design and regulatory goals in Exhibit 19. | ACWE concurs; Exhibit 4 will include noise effects. |
| **141.** | DPS p. 12 | Noise and Vibration Comment 6 | 6. PSS Section XV, Application Contents and Exhibit 9, Alternatives: As required by 16 NYCRR §1001.19 Exhibit 9(c)(4), the scope should include "alternative layouts of the turbines within the site location." DPS Staff also recommends including conceptual alternatives with quieter turbines. | A range of possible turbines suitable for the Project and a range of possible layouts with differing numbers of turbines will be evaluated in Exhibit 9. See PSS, p.12, discussion of Exhibit 2. |
| **142.** | DPS p. 12 | Noise and Vibration Comment 7 | 7. PSS Section XV, Application Contents, Exhibit 15, Public Health and Safety: This section should provide a list of guidelines, standards, and criteria that will be included in the scope for the analysis of potential health effects from | ACWE concurs. Exhibit 15 of the Application will identify guidelines and standards used to assess potential health effects. |

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| | | | noise, infrasound and vibration. | |
| **143.** | DPS p. 12-13 | Noise and Vibration Comment 8 | 8. PSS Section XV, Application Contents, Exhibit 19, Noise: DPS Staff recommends that the Applicant propose scope, methodologies or criteria for the following sections of the Article 10 regulations (16 NYCRR §1001.19 sections (b), (c), (e), (h), (i), (j), (l), (m) and (n)). In particular, DPS Staff recommends that the PSS specifies the following: | ACWE will meet the requirements of 1001.19 using methods discussed previously with DPS staff. For sake of clarity, it will revise its PSS to document these methods. See responses to specific staff comments below. |
| **144.** | DPS p. 13 | Noise and Vibration Comment 8a | a. 16 NYCRR §1001.19(b): Pre-construction Baseline Noise Surveys: Methodologies for surveying pre-construction baseline sound conditions; standards, guidelines, procedures; ranges of frequencies of interest; definitions for prominent tones; positions to be tested and justifications as to why they are considered to be sufficient and representative of existing landscapes for potentially impacted receptors; specifications for sound instrumentations to be used; time frames of evaluation, and weather conditions and exclusions for testing, among other technical details. | ACWE will file an ambient noise measurement protocol to specify its planned methods for collecting the ambient noise data required by 1001.19(b). |
| **145.** | DPS p. 13 | Noise and Vibration Comment 8b | b. 16 NYCRR §1001.19(c): Evaluation of Future Noise Levels to be Produced by Construction of the Facility: Specifications for computer noise modeling programs; database for construction noise emissions, and guidelines for evaluation of construction noise. | ACWE will file a revised PSS specifying its planned methods for developing the evaluation of the Project construction noise levels that is required by 1001.19 (c). These methods will follow the methods used in developing Exhibit 19 of the Application in Case 16-F-0328 Number Three Wind. |
| **146.** | DPS p. 13 | Noise and Vibration Comment 8c | c. 16 NYCRR §1001.19(e): Evaluation of Future Operational Noise Levels of the Facility: Specifications for | ACWE will file a revised PSS specifying its planned methods for developing the evaluation of the Project operating noise levels that is required by 1001.19 (e). These |

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| | | | computer noise modeling programs, range of frequencies to be evaluated; definitions, standards, guidelines, scope, and methodologies for evaluation of amplitude modulation, prominent tones, and for calculation and extrapolation of low frequency noise and infrasound. | methods will follow the methods used in developing Exhibit 19 of the Application in Case 16-F-0328 Number Three Wind. |
| **147.** | DPS p. 13 | Noise and Vibration Comment 8d | d. 16 NYCRR §1001.19(h): Noise Standards and Design goals for the Facility: Consideration of s hort-term WHO-1999 thresholds for speech intelligibility for sound sensitive receptors; consideration of long-term WHO-2009 identified thresholds for minimization of sleep disruptions, prevention of cardiovascular disease, and other health effects, on participant and non-participant receptors; design goals for minimization of annoyance and airborne induced vibrations from sounds with strong low-frequency content (See ANSI 12.9-2005/Part 4, Annex D); design goals for boundary lines and undeveloped lands; design goals for minimization of annoyance from perceptible vibrations on existing buildings (ANSI S 2.71-1983); and minimization of annoyance from prominent tones and amplitude modulated sounds, among others. See comment #2 of this section above. | 1001.19(g) requires a description of noise standards applicable to the facility, including local laws and design goals. ACWE's application will demonstrate compliance with local laws applicable to the facility and ACWE's design goals. |
| **148.** | DPS p. 13 | Noise and Vibration Comment 8e | e. 16 NYCRR §1001.19(i): Scope for 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. | As required by regulations, Exhibit 19.i will discuss reasonable noise abatement measures for construction. |

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| **149.** | DPS p. 14 | Noise and Vibration Comment 8f | f. 16 NYCRR §1001.19(j): Scope for identification and evaluation of reasonable abatement measures for the operation of the proposed facility. | As required by regulations, Exhibit 19.i will discuss reasonable noise abatement measures for operation. |
| **150.** | DPS p. 14 | Noise and Vibration Comment 8g | g. 16 NYCRR §1001.19(k): Evaluation of potential for structural damage from construction activities and potential for interference with technical installations sensitive to vibration such as the United States Geological Survey (USGS), National Resources Canada (NRCAN), and Comprehensive Nuclear-Test Ban Treaty Organization (CBTO) Stations. | ACWE concurs. |
| **151.** | DPS p. DPS p. 14 14 | Noise and Vibration Comment 8h | h. 16 NYCRR §1001.19(l). Postconstruction Noise Evaluation Studies to establish conformance with design and regulatory goals. See comment #2 of this section above. | ACWE concurs. |
| **152.** | DPS p. 14 | Noise and Vibration Comment 8i | i. 16 NYCRR §1001.19(m): Identification of practicable operational controls and mitigation measures to address reasonable complaints associated with excessive sound levels, prominent tones, amplitude modulated sounds, sounds with excessive low-frequency content, and perceptible vibrations on sensitive buildings. | ACWE concurs. |
| **153.** | DPS p. 14 | Noise and Vibration Comment 8j | j. 16 NYCRR §1001.19(n): Discussion of assumptions and data associated with the evaluation of short- and long-term WHO guidelines and local regulations. | ACWE concurs. ACWE will provide DPS with computer files with inputs to the noise modelling. The Application will discuss modelling assumptions. |

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| **154.** | DPS p. 14 | Noise and Vibration Comment 8k | k. Other: Scope, methodologies and criteria for evaluation of cumulative sound impacts if any, including sound levels, prominent tones, amplitude modulation, sounds with excessive low-frequency content, and perceptible vibrations on sensitive buildings. | Cumulative noise impacts will be accounted for by use of ambient noise measurements that capture noise from existing wind turbines. |
| **155.** | DPS p. 14 | Noise and Vibration Comment 9a | 9. PSS Section XV, Application Contents, Exhibit 19:<br>a. Exhibit 19, Section (1)(b)(iv) should separate commercial uses from other uses such as places of worship, schools, and public uses such as libraries and Town halls. | ACWE concurs. |
| **156.** | DPS p. 14-15 | Noise and Vibration Comment 9b | b. Exhibit 19, Section (2) should specify whether the methodology recommended in NARUC-2011 is consistent with the methodology recommended for evaluation of WHO-1999 and WHO-2009 guidelines. DPS Staff notes that WHO-2009 guidelines refer to the ISO Standard 1996-2:19876 and the European directive 2002/49/EC June 25, 2002 (18.7.2002).[7] In particular, the PSS should discuss the standards for determination of sound power levels from the turbines (e.g., IEC 61400-Parts 11, IEC TS 61400 part 14, and sound power level uncertainties) and height for evaluation of sound receptors (e.g., 1.5 mts. and/or 4.0 mts.). | Exhibit 19 will discuss differences in the NARUC and WHO guidance. |

[6] International Standard ISO 1992-2:1987 (E) Acoustics – Description and Measurement of Environmental Noise – Part 2: Acquisition of Data Pertinent to Land Use.

[7] Directive 2002/49/EC of the European Parliament and the Council of 25 June relating to the Assessment and Management of Environmental Noise. Official Journal of the European Communities (July 18, 2002).

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| **157.** | DPS p. 15 | Noise and Vibration Comment 9c | c. Exhibit 19, Section (3)(a) should specify whether the Project noise sources will include back-up emergency generators. | ACWE will update the PSS to specify noise levels from any emergency generators will be evaluated. |
| **158.** | DPS p. 15 | Noise and Vibration Comment 9d | d. Exhibit 19, Section (3)(c) should specify whether "parcel boundaries" refer to participant, non-participant and potential participant boundary lines. | Parcel boundaries refers to recorded property boundaries without reference to participation. |
| **159.** | DPS p. 15 | Noise and Vibration Comment 9e | e. Exhibit 19, Section (4)(a) should propose an objective method for evaluation and selection of ambient noise levels for sensitive receptors including a discussion about whether the scope of the pre-construction baseline sound level surveys comprise a sufficient number of testing locations. | ACWE's noise expert will select the appropriate value of ambient noise based on the receptor's setting relative to likely noise sources, e.g. proximity to high traffic roads, in and open field or wooded area. The noise report to be included with the Application will describe this selection process and discuss the sufficiency of the ambient measurement surveys. |
| **160.** | DPS p. 15 | Noise and Vibration Comment 9f | f. Exhibit 19, Sections (4)(b) and 4(d) should specify that the L10 and L50 statistical noise descriptors (respectively) should be evaluated based upon predictions of sound levels from the Facility under normal operation conditions. Therefore, the periods when the turbines will not be operating (not rotating) should be excluded from calculation of these descriptors. | DPS's position is noted; but long-term averages, particularly those intended to evaluate potential health impacts, should consider all times, even those when the Project is not operating due to insufficient wind. |
| **161.** | DPS p. 15 | Noise and Vibration Comment 9g | g. Exhibit 19, Section (4)(c) should specify that the Leq noise descriptor will be evaluated both including and excluding the periods when the turbines will not be operating (rotating). | See response to comment 9f (#78). |

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| **162.** | DPS p. 15 | Noise and Vibration Comment 9h | h. The methodology proposed in Exhibit 19, Section (4)(d) for determination of the L50 statistical noise descriptor needs more discussion. DPS Staff notes that the L50 statistical sound level depends not only on the wind potential of a particular site but also on the turbine model selected for the Project including the cut-in and cut-out wind speeds. | ACWE will update the PSS to further specify the method for calculating projected L50 statistics. |
| **163.** | DPS p. 15 | Noise and Vibration Comment 9i | i. Exhibit 19, Sections (5)(i) and (ii) proposes design goals for all "year-round residences" only. See DPS Staff comment #3 of this section above. In addition, proposed design goals do not specify the noise descriptor and time-frames of evaluation (e.g., daytime, nighttime, full-day). | See Response to Comment 56; The 45 dBA design goal was proposed for the ESL value, which was to be calculated based on the maximum turbine noise emission, regardless of time of day. |
| **164.** | DPS p. 16 | Noise and Vibration Comment 9j | j. Exhibit 19, Section (5)(ii) specifies that receptors categorized in this section "will have no design goals". DPS Staff notes that this section should provide consideration of design goals for minimization of annoyance, speech intelligibility, and prevention of interference with human communication for these receptors as well. | Exhibit 19 will address the possibility of interference with speech at the reported sound levels. |
| **165.** | DPS p. 16 | Noise and Vibration Comment 9k | k. Exhibit 19, Section 6 should contain more discussion. Also, copies of local regulations on noise should be provided to DPS Staff for review with the Applicant's response to PSS comments. | Invenergy has discussed previously with staff about the use of the ESL as a proxy for expected L10 levels, and it is open to further discussion. Noise requirements of local laws were summarized in PSS Table X-1. Please see Response to Comment 4 regarding ACWE commitment to provide staff copies of local laws. |
| **166.** | DPS p. 16 | Noise and Vibration Comment 9l | l. Exhibit 19, Section (7)(b) and the Application should include a discussion about whether typical construction of the most potentially impacted sound receptors within the | Exhibit 19 of the Application will discuss the basis for assuming a 15 dBA attenuation between noise levels outside and inside a residence. |

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| | | | Project Area will be able to provide an outdoor to indoor noise reduction of 15 dBA with the windows open. | |
| **167.** | DPS p. 16 | Noise and Vibration Comment 9m | m. Since NARUC-2011 identifies the 35-45 dBA noise range as the "grey area," Exhibit 19 Section (7)(c) should also include the number of receptors with sound levels between 35 and 40 dBA. | ACWE will modify the PSS to change "<40 dBA." to "35 to 40 dBA." (Note this is mostly a labeling change to what was specified in the original PSS). |
| **168.** | DPS p. 16 | Noise and Vibration Comment 9n | n. Exhibit 19 Section (7)(d): Discussion of proposed methodologies should take place during the PSS and Stipulation phases, however, if no stipulations are proposed, the Applicant is strongly advised to consult with DPS Staff prior to filing the Application. | Following the submittal of these responses, ACWE will schedule a meeting with active parties interested in conferring on noise analysis whether or not such meetings might result in a stipulation. |
| **169.** | DPS p. 16 | Noise and Vibration Comment 10 | 10. The Applicant should resubmit the proposed PSS with a revised Exhibit 19 addressing the comments included herein. For illustration about the scope of studies, methodologies and standards that have been adopted for other projects, DPS Staff recommends consulting signed stipulations for other Article 10 Wind Generating Facilities. | ACWE will update the PSS following filing these responses. |
| **170.** | DPS p. 16 | Cultural Resources | Exhibit 20. Cultural Resources<br>1. The analysis regarding avoiding adverse impacts on the setting of historic resources should include visual and noise impacts. | ACWE concurs. |
| **171.** | DPS p. 16-17 | Geology, Seismology and Soils | 16 NYCRR §1001.21(a) – Existing Slopes Map | A map delineating existing slopes (0-3%, 3-8%, 8-15%, 15-25%, 25-35%, 35% and over) on and within the drainage area potentially influenced by the Facility Site will be |

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| | | Existing Slopes Map | 1. The soils and slopes maps should show all proposed Facilities, not just turbines, access roads, and cable routes. The Application should identify sensitive environmental and agricultural receptors for potential hazards associated with construction on extremely steep slopes (slopes greater than 25%). For all Facilities proposed to be located in areas of extremely steep slopes, the Application should assess the risk of potential impacts associated with construction on these areas, including potential for extreme rainfall events leading to severe erosion hazards and water quality impacts at downstream water resources and aquatic habitats. Mitigation and avoidance measures, including alternative siting of Project facilities, should be discussed for each location. | prepared using the USGS National Elevation Dataset and included in the Article 10 Application. Digital Elevation Model (DEM) data will be processed using ESRI ArcGIS® Software to delineate a drainage area and develop slope mapping. These maps will show all Facility components.<br><br>The design process utilized to define the preliminary layout that ultimately will be set forth in the Application will include analysis of various environmental resources and construction considerations (including steep slopes) in an effort to avoid and minimize impacts. To the extent that any Facility components are sited on steep slopes, the Application will assess the risk of potential impacts associated with construction on these areas, including potential for extreme rainfall events leading to severe erosion hazards and water quality impacts at downstream water resources and aquatic habitats. |
| **172.** | DPS p. 17 | Excavation Techniques to be Employed | 16 NYCRR §1001.21(f) – Excavation Techniques to be Employed<br><br>1. Where HDD is proposed, the Applicant should perform an evaluation of the suitability of existing soils and shallow bedrock, including an assessment of frac-out risk potential, based on the results of the preliminary geotechnical investigations and publicly available soil and bedrock data. Setback distances for bore entry and exit pits from wetlands and stream banks should be identified. A frac-out contingency plan should be provided, identifying site-specific receptors and establishing frac-out mitigation and response methods. | The Application will include the results of the Preliminary Geotechnical Study which will sample selected locations for soil conditions. The Application will identify locations where HDD is proposed and will provide a general discussion of the soil suitability in those locations. The Application will include a frac-out contingency plan and setback distances ACWE for use between boring pits and wetlands and streams. |

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| **173.** | DPS p. 17 | Suitability for Construction Comment 1a | 16 NYCRR §1001.21(h) – Suitability for Construction<br>1. In order to evaluate the suitability of existing soils for construction and use as backfill, DPS Staff recommends:<br>a. The Application should include a preliminary analysis of the suitability of excavated materials for reuse as fill. Particular focus should be applied in evaluating the risk of degradation of turbine foundations. Areas within the Project boundary that are identified as having a moderate or high risk of corrosion of steel or concrete, as defined by the National Resources Conservation Service (NRCS) Web Soil Survey, should be identified. Acidic soils are generally considered to have a high risk of corrosion of steel and concrete. Soils containing large quantities of limestone may also be corrosive to steel, particularly if they are located in areas of shallow groundwater. Measures for reducing risk of degradation of foundation structures should be discussed. This evaluation should be considered in the preliminary calculations of fill materials that will be required for the Project. | ACWE concurs. The Application will identify WTGs in locations where soil survey data indicate soils present a high risk for steel or concrete corrosion, and it will describe protective measures for turbines in these locations. |
| **174.** | DPS p. 17-18 | Suitability for Construction Comment 1b | b. The Applicant should provide a detailed plan describing the scope of preliminary geotechnical investigations that will be performed prior to the Application. The Preliminary Geotechnical Investigation Plan should identify and provide rationale for the locations of the proposed soil borings and describe the sampling methods and types of geotechnical and geophysical analyses that will be performed. The plan should provide a full description of the field investigations and testing proposed for characterizing the subsurface | The Preliminary Geotechnical Study will include test borings in representative locations based on soil maps and planned turbine locations. It will also include test borings at two or more locations where ACWE is considering HDD under a wetland or stream. The Preliminary Geotechnical Report included as Appendix 21 of the Application in Case 16-F-0328 Number Three Wind provides an example illustrating the scope of the study that will be conducted for ACWE's Application. |

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| | | | conditions in the Project Area, and include test borings in representative locations of turbine foundations, blasting locations, and areas where HDD is considered for installation of electric lines. Boring locations should be selected to characterize the various mapped soils and shallow bedrock types in the Project Area. Test borings should be included in the preliminary geotechnical investigation regardless of seasonal restrictions.<br><br>The results of preliminary geotechnical tests should be applied in evaluating:<br><br>i. Turbine foundation design;<br><br>ii. Excavation techniques, including blasting;<br><br>iii. Preliminary cut and fill calculations;<br><br>iv. Suitability of existing soils for reuse as fill; and<br><br>v. Crossing methods of sensitive environmental resources by collection lines and transmission lines. | |
| **175.** | DPS p. 18 | Suitability for Construction Comment 2 | 2. The Application should identify all known sites of environmental contamination within the Project Area. For each site, the Application should:<br><br>a. Provide the site name and describe the status of investigation and remediation activities at the site;<br><br>b. Describe all project-related activities proposed within 2,000 feet of the site; and<br><br>c. Identify how potentially contaminated soils and | ACWE concurs and will identify contaminated sites from publicly available information maintained by NYS DEC and US EPA. |

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| | | | groundwater will be handled, stored, and disposed. | |
| **176.** | DPS p. 18 | Preliminary Blasting Plan Comment 1 | 16 NYCRR 1001.21(i) – Preliminary Blasting Plan<br>1. The preliminary blasting plan included in the Application should establish setbacks from existing infrastructure. A rationale for the proposed setback distances should be provided. The plan should also describe methods for pre- and post-blasting inspections of nearby infrastructure and processes for mitigation of impacts. | The Application will include a Preliminary Blasting Plan covering the requested details. See Appendix 21.i of the Application in Case 16-F0328 Number Three wind for an example of the plan ACWE will include in its Application. Although ACWE agrees to provide a map showing all known gas and oil wells, storage fields and pipelines within one mile of the Project Area, by complying with industry standards, the impacts of any blasting conducted by ACWE will be limited to the immediate area of the blast charge, less than 250 feet. |
| **177.** | DPS p. 18 | Preliminary Blasting Plan Comment 2 | 2. Procedures and timeframes for notifying host communities and property owners within one-half mile radius of the blasting site; and complaint response and resolution procedures should be described. | The blasting plan will include notification procedures. |
| **178.** | DPS p. 18-19 | Soil Types Map Comment 1 | 16 NYCRR §1001.21(o) – Soil Types Map<br>1. The Application should include a map of the Project Area showing all locations designated as:<br>a. prime farmland;<br>b. prime farmland, if drained;<br>c. unique farmland;<br>d. farmland of Statewide importance; and<br>e. farmland of local importance. | The Application will contain a map using data from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), Web Soil Survey, to display the locations of prime farmland, prime farmland if drained, and farmland of statewide importance.<br>Based on correspondence with the NRCS, no soils in New York State are categorized as “unique farmland.” Further the term “Farmland of Local Importance” is not defined by USDA, nor is the Applicant aware of New York State defining this term. It may be defined in some instances by local agencies (e.g., county agricultural board, local regulations). If such designations are defined locally and are relevant to the proposed Facility, they will be included on the mapping prepared in support of Exhibit 21. |
| **179.** | DPS p. 19 | Soil Types Map Comment 2 | 2. A discussion should be included describing how the | This will be addressed in Exhibit 22 section 22 q. |

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| | | | siting, construction and operation of the Facility will avoid or otherwise minimize impacts to farmland with these designations, including a description of the proposed methods for soil stripping, storage and replacement upon the completion of construction, where disturbance to such areas cannot be avoided. | |
| **180.** | DPS p. 19 | Soil Types Map Comment 3 | 3. Methods for identifying the locations of drainage tile in designated farmland should be included in the Application, along with a description of practices for restoration of farmland drainage systems following construction. | This will be addressed in Exhibit 22, section 22 q. |
| **181.** | DPS p. 19 | Terrestrial Ecology and Wetlands<br><br>Identification and Description of Plant Communities Comment 1 | Exhibit 22. Terrestrial Ecology and Wetlands<br>In addition to the information required by PSL §1001.22 and specified in the PSS, Exhibit 22 shall contain:<br>16 NYCRR §1001.22(a) – Identification and Description of Plant Communities<br>1. Information on plant communities of the Facility Site based on the results of reconnaissance-level field verification conducted to date and in 2019, review of USGS NLCD land cover data, and recent aerial imagery; | ACWE assumes the reference to 2019 was intended to be 2018; the Application will provide this information. |
| **182.** | DPS p. 19 | Identification and Description of Plant Communities Comment 2 | 2. Specific information on, and a detailed description of, all ecological communities identified within parcels that will host Facility components, as classified according to Ecological Communities of New York State (Edinger et al., 2014); | Comment noted. The Application will include a detailed description of the existing plant communities on the Facility Site based on aerial imagery, NLCD information, and on-site surveys. These communities will be classified according to community descriptions included in the Ecological Communities of New York State (Edinger et al., 2014). |

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| **183.** | DPS p. 19 | Identification and Description of Plant Communities Comment 3 | 3. Maps, based on aerial photography, showing approximate locations and extent of identified plant communities as classified according to Ecological Communities of New York State (Edinger et al., 2014); | Comment noted. |
| **184.** | DPS p. 19 | Identification and Description of Plant Communities Comment 4 | 4. Maps at a scale of 1:2000 for Project areas within 500 feet of disturbance areas showing approximate locations and extent of identified plant communities as classified according to Ecological Communities of New York State (Edinger et al., 2014); and | Depending on the extent and number of community types that must be depicted, the Applicant will determine the appropriate scale of such mapping. |
| **185.** | DPS p. 19 | Identification and Description of Plant Communities Comment 5 | 5. A plant species list, including all species identified during various field surveys and the month and year observed, to the extent available. | ACWE concurs. |
| **186.** | DPS p. 20 | Analysis of Impacts to Vegetation from Construction and Operation Comment 1a | 16 NYCRR §1001.22(b) – Analysis of Impacts to Vegetation from Construction and Operation<br>1. Proposed temporary and permanent impacts to plant communities shall be calculated and discussed as follows:<br>a. Discuss specific assumptions associated with approximate limit of vegetation clearing for each type of Facility component as identified in the Preliminary Design Drawings associated with Exhibit 11; | ACWE concurs. |
| **187.** | DPS p. 20 | Analysis of Impacts to Vegetation from Construction and Operation | b. Provide a table of assumed area disturbance for each Project component type associated with Exhibit 11, as addressed in “a” above; | ACWE concurs. |

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| | | Comment 1b | | |
| **188.** | DPS p. 20 | Analysis of Impacts to Vegetation from Construction and Operation Comment 1c | c. Calculate, using GIS software, and present in a summary impact table, the number of acres impacted. Permanent impact calculations will include all tree clearing for construction and operation of the Facility; and | ACWE concurs. |
| **189.** | DPS p. 20 | Analysis of Impacts to Vegetation from Construction and Operation Comment 1d | d. The plant community mapping referenced in 22(a) above will also depict vegetation cover types in relation to proposed limits of vegetation disturbance, and associated GIS shapefiles of all areas of disturbance will be provided to NYSDEC and NYSDPS. | ACWE concurs. |
| **190.** | DPS p. 20 | Invasive Species Identification Comment 1 | 16 NYCRR §1001.22(b) – Invasive Species Identification<br>1. A list of all non-native, invasive plant and insect species observed during site-specific field investigations and known to occur within the Facility location. The list of non-native, invasive plant species in areas of proposed disturbance shall be based on a qualitative survey conducted concurrently with field surveys in support of Exhibits 22 and 23. | The inclusion of insect species appears to go beyond the scope of 1001.22 (p). The Application will list the invasive plant species identified through field surveys. The list of invasive insect species will be limited to incidental observations of concentrations of insects during field surveys conducted in support of Exhibits 22 and 23. |
| **191.** | DPS p.20 | Invasive Species Identification Comment 1a | a. For each invasive species, identify an area and concentration threshold that requires mapping and an individual treatment plan; | A pre-construction survey of areas to be disturbed during construction will provide this information. |
| **192.** | DPS p. 20 | Invasive Species Identification Comment 1b | b. Maps at a scale of 1:2000 of any identified concentrations of non-native, invasive plant species in | Depending on the extent and number of concentrations of non-native plant species, the Applicant will determine the appropriate scale of such mapping. |

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| | | | areas of proposed disturbance; and | |
| **193.** | DPS p. 20 | Invasive Species Identification Comment 1c | c. A list of invasive insect species, if any, limited to incidentally observed concentrations of insects during field observations in support of Exhibits 22 and 23. | To the extent invasive insects are identified through incidental observations during field reconnaissance, they will be listed. |
| **194.** | DPS p. 21 | Invasive Species Control Plan Comments 1-10 | 16 NYCRR §1001.22(b) – Invasive Species Control Plan<br><br>An Invasive Species Control Plan that addresses the plant species listed in 6 NYCRR Part 575 will be included in the Application. The Invasive Species Control Plan will include:<br><br>1. A summary of the survey methods to be used to identify existing non-native, invasive species;<br><br>2. Specific methods the Applicant proposes to use to ensure that imported fill and fill leaving the Facility Site will be free of non-native, invasive plant and insect species or material to the extent practicable;<br><br>3. Information on whether fill material brought to the Facility Site will be free of non-native, invasive plant and insect species. Describe how fill brought to the Facility Site will be used in areas free of invasive species;<br><br>4. A description of specific methods the Applicant proposes to use to prevent the introduction, proliferation and spread of non-native, invasive plant and insect species associated with site grading, erosion and sediment control measures;<br><br>5. Identification of insect species through incidental observations while on-site performing other field studies | ACWE concurs. |

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| | | | (i.e., wetland delineations);<br><br>6. Details of procedures to prevent the spread of invasive insects, such as the emerald ash borer and hemlock woody adelgid, and a discussion of how the Applicant will comply with the State quarantine and protective zones, where applicable;<br><br>7. Implementation plans for ensuring that equipment and personnel arrive at and depart from the Facility Site clean and free of non-native, invasive plant and insect species, including a description of options for cleaning equipment, personnel, and proper disposal of materials known to be infested;<br><br>8. A detailed description of the Best Management Practices or procedures that will be implemented, and the education measures that will be used to educate workers;<br><br>9. A plan for post-construction monitoring, survey measures and procedures for revising the Invasive Species Control Plan if the established goals are not met; and<br><br>10. Anticipated methods and procedures used to treat non-native, invasive plant and insect species that have been introduced or spread as a result of the construction or operation of the Facility. | |
| **195.** | DPS p. 22 | Avoidance and Mitigation Measures regarding Vegetation Impacts | 16 NYCRR §1001.22(c) – Avoidance and Mitigation Measures regarding Vegetation Impacts<br><br>1. Provide a detailed description of the proposed measures that will be implemented to avoid, minimize, and potentially | ACWE will provide the requested description as required by 1001.22(c). |

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| | | | mitigate any temporary and permanent impacts to existing, non-invasive plant communities, particularly grasslands, wetlands, and interior forests, as a result of the construction and operation of the Facility. | |
| **196.** | DPS p. 22-23 | Vegetation, Wildlife, and Wildlife Habitats | 16 NYCRR §1001.22(d) – Vegetation, Wildlife, and Wildlife Habitats<br>1. Identification and description of plant communities, species, and wildlife habitat.<br>a. Such descriptions will include field identification of aquatic habitats, plant communities, and wildlife habitats that could potentially support federally or state-listed threatened and endangered (T&E) species, state species of special concern (SSC), and state species of greatest conservation need (SGCN) as documented during on-site field investigations (e.g., ecological cover type assessments, habitat assessments, and wetland delineations);<br>b. Ecological cover type assessments and habitat assessments identified above, classified according to Ecological Communities of New York State (Edinger et al., 2014);<br>c. Identification and description of any designated unusual habitats or significant natural communities that could support federally or state-listed T&E species, SSC, or SGCN;<br>d. Provide a table of state and federally listed species | ACWE concurs. To the extent that the information requested is provided in another section the Application will include a cross reference. |

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| | | | occurring or likely to occur within the Project Area including the following columns:<br>i. Species name;<br>ii. Federal status;<br>iii. NYS status;<br>iv. SGCN listing;<br>v. Habitat preference identified according to Ecological Communities of New York State (Edinger et al., 2014);<br>vi. Identify maps from 1001.22(a)(3) that include habitat for each species;<br>vii. Source of information indicating potential presence of species; and<br>viii. Indicate if the species was observed on-site.<br>e. A characterization of avian species using data from NHP, NYSDEC staff, USFWS, local experts (e.g. Delaware Otsego Audubon Society (DOAS)) (see Stipulation 22(d)(5)), New York Breeding Bird Atlas (BBA), Hawk Migration Association of North America, Christmas Bird Count (CBC), eBird, on-site surveys, U.S. Fish and Wildlife Service (USFWS) and New York Natural Heritage Program (NHP);<br>f. If hibernacula are identified within the Facility Site, or five miles from any Facility component, the location and distance to the nearest identified hibernacula will be provided separately and confidentially to NYSDEC and | |

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| | | | NYSDPS;<br><br>g. Information on amphibians and reptiles based on the New York State Amphibians & Reptile Atlas Project (Herp Atlas), database records obtained from NHP, NYSDEC, and USFWS, assessments of suitable habitat in the Facility Area, and any field observations made on-site or in the vicinity of the Facility;<br><br>h. Vernal pools should be inventoried at the time of wetland field delineations. The application should identify vernal pools that could be disturbed by construction or operation of the Facility. A discussion should be included that evaluates the use of the identified vernal pools by amphibians and the potential impacts to those species; and<br><br>i. A list of typical terrestrial invertebrates found in the region and likely to occur within the Facility Site based upon available habitat and observations made during on-site surveys. The Applicant will contact/consult with NHP, NYSDEC and USFWS to identify any potential species of concern. | |
| **197.** | DPS p. 23 | Species List | 16 NYCRR §1001.22(e) – Species List<br><br>1. A plant and wildlife species inventory will be included based on information obtained in support of subpart (d) above and (h) below, existing data available from the NHP, NYSDEC Staff, USFWS, known local experts if any, New York Breeding Bird Atlas (BBA), Hawk Migration Association of North America, Christmas Bird Count (CBC), eBird, and on-site surveys. Include a citation for each | Section 1001.22 (e) calls for a list of wildlife species. ACWE will provide the required inventory based on its field reconnaissance and the sources listed in the comment. ACWE will include vegetation species identified during reconnaissance and the sources listed if relevant. |

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| | | | species and indicate the data source for its inclusion on the list. | |
| **198.** | DPS p. 23-24 | Analysis of the Impact of Construction and Operation Comment 1 | 16 NYCRR §1001.22(f) – Analysis of the Impact of Construction and Operation<br>1. Include a summary narrative and associated mapping to explain and illustrate:<br>a. Potential and expected construction and operational impacts to vegetative cover types;<br>b. Wildlife habitats and the species that they support (including a discussion of impacts from habitat fragmentation);<br>c. Wildlife concentration areas, if identified;<br>d. Travel corridors, if identified; and<br>e. Terrestrial organisms identified during pre-construction field studies in relation to the proposed limits of disturbance. | Exhibit 22 will discuss items a-d. Mapping of expected limits of disturbance on aerial photography will show impacts to vegetation. ACWE is uncertain what "terrestrial organisms" the commenter is referring to in item e. |
| **199.** | DPS p. 24 | Analysis of the Impact of Construction and Operation Comment 2 | 2. Include a discussion addressing any direct and indirect construction-related impacts that may occur to wildlife and wildlife habitat, including:<br>a. Incidental injury and mortality due to construction activity and vehicular movement;<br>b. Habitat disturbance and loss associated with clearing and earth-moving activities; and | Section 22 f will include the described discussion. |

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| | | | c. The direct impacts of wildlife displacement. | |
| **200.** | DPS p. 24 | Analysis of the Impact of Construction and Operation Comment 3 | 3. Include a discussion addressing potential direct and indirect operational impacts regarding:<br>a. Loss of habitat;<br>b. Forest and grassland fragmentation;<br>c. Wildlife displacement;<br>d. Avian collisions;<br>e. Bat collisions; and<br>f. To the extent any documented wildlife travel corridors or winter concentration areas are identified within or adjacent to the Facility Site, direct and indirect impacts to such corridors will be addressed. | Section 22 f will include the described discussion. |
| **201.** | DPS p. 24 | Analysis of the Impact of Construction and Operation Comment 4 | 4. Include a discussion of potential short-term and long-term impacts to plants, animals, and habitats that may result from the application of biocides, if any, during site preparation, construction, maintenance or operation. | Section 22 f will include the described discussion. |
| **202.** | DPS p. 24-25 | Analysis of the Impact of Construction and Operation Comment 5 | 5. Include a summary impact table quantifying anticipated temporary and permanent impacts associated with the various facility components in relation to wildlife habitats, identified concentration areas or travel corridors (to the extent data associated with such areas or corridors are readily available or provided to the Applicant by NYSDEC personnel), and vegetation cover types classified according | The Application will include a summary impact table quantifying anticipated temporary and permanent impacts associated with the various Project components in relation to wildlife habitats, identified concentration areas or travel corridors (to the extent data associated with such areas or corridors are readily available or provided to the Applicant by NYSDEC personnel), and vegetation cover types, particularly grasslands and interior forests, if affected. |

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| | | | to Ecological Communities of New York State (Edinger et al, 2014), particularly grasslands and interior forests, if affected. | |
| **203.** | DPS p. 25 | Analysis of the Impact of Construction and Operation Comment 6 | 6. Include the following information regarding the presence of federally and state-listed T&E species, SCC, rare species, and SGCN:<br>a. A discussion of the Facility's potential to impact such species or their habitats;<br>b. Documented T&E species, SCC, and SGCN will be based on database records obtained from the NHP, other known records documented by NYSDEC, USFWS and on-site surveys; and<br>c. If it is determined by the NYSDEC that construction or operation of the Facility is likely to result in a take of state-listed species, including the adverse modification of habitat on which a listed species depends, the Applicant will submit an avoidance, minimization, and mitigation plan that demonstrates a net conservation benefit to the affected species pursuant to 6 NYCRR Section 182.11 (Part 182), along with the informational requirements of an Incidental Take Permit (ITP), as provided for in Part 182. The Applicant should consult with NYSDEC to determine if an Incidental Take Permit is anticipated prior to filing the Application. | Section 22 f will include the described discussion. |
| **204.** | DPS p. 25 | Avoidance and Mitigation Measures | 16 NYCRR §1001.22(g) – Avoidance and Mitigation | Section 22 f will include the described description. |

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| | | | Measures<br><br>1. A description of the impact avoidance and minimization efforts used in developing the Facility should be provided. The Facility design, construction controls, and operational measures that can be reasonably implemented to avoid or minimize impacts to wildlife and wildlife habitat within the Facility Site should be described. Measures to avoid or mitigate impacts to vegetation will be addressed in part (c) of Exhibit 22. | |
| **205.** | DPS p. 25-27 | Proposed Wind-Powered Facilities<br><br>Avian and Bat Impact Comment 1 | 16 NYCRR §1001.22(h) – Proposed Wind-Powered Facilities<br><br>Include a description of an avian and bat impact analysis and monitoring program for the Facility, including:<br><br>1. A discussion of potential construction and operation-related impacts to protected avian and bat species, including northern long-eared bats and migratory tree bats, based on the results of pre-construction avian and bat studies as agreed to by the Applicant, NYSDEC, USFWS, and standard industry practice.<br><br>In addition, the Article 10 Application will include an analysis of potential cumulative impacts to avian and bat species that could result from operation of the Facility. The cumulative analysis should include:<br><br>a. Cumulative Collision Mortality<br><br>i. An examination of data on installed wind capacity in New York as well as the projected increase in installed New | ACWE will provide the described information. |

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| | | | York wind capacity during the life of the Project.<br><br>b. Cumulative Avian Impacts<br><br>i. An examination of bird mortality (birds/turbine/year) across New York in the past 10 years as well as within 100 miles of the Project;<br><br>ii. An estimate, based on the results of the results in the BBCS, of species composition of potential avian mortality; and<br><br>iii. The USFWS Bayesian collision risk model (or an updated model) should be run to determine the potential take of bald and golden eagles at the Project and then compared to the Local Area Population (LAP) per the USFWS Eagle Conservation Plan Guidance, based on eagle observation surveys completed at the Project location and as agreed through consultation with NYSDEC and USFWS.<br><br>c. Cumulative Bat Impacts<br><br>i. An examination of bat mortality (bats/turbine/year) across New York in the past 10 years;<br><br>ii. A geographically focused look at bat mortality (bats/turbine/year) in the past 10 years within 100 miles of the Project;<br><br>iii. An estimate, based on the results in the BBCS, of species composition of potential bat mortality;<br><br>iv. A discussion of the population effects of wind turbine | |

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| | | | caused mortality to migratory tree bats; and<br><br>v. A discussion regarding the potential take of northern long-eared bats based on the most recent publicly-available data and past mortality data from New York State wind projects. Take estimates should consider regional influences based on examination of mortality data within 100 miles of the Project.<br><br>The cumulative analysis will utilize post-construction monitoring data from operating wind facilities throughout New York and within 100 miles of the Project to assess potential impacts to bird and bat species given the proposed Facility location relative to other wind-power projects. | |
| **206.** | DPS p. 27 | Avian and Bat Impact Comment 2 | 2. The Application should provide information associated with a proposed post-construction monitoring program to be implemented to assess direct and indirect impacts of the wind Facility on avian and bat species and their habitats in a manner consistent with the NYSDEC's Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects (Guidelines) (Revised June 2016). Exact details of the post-construction monitoring program will ultimately be determined on a site-specific basis through discussions between the Applicant, NYSDEC, NYSDPS and USFWS, and be in place prior to the commencement of operation. | ACWE concurs with the comment except that ACWE intends to have the post construction monitoring plan in place prior to the Siting Board's decision on the Application. |
| **207.** | DPS p. 27 | Avian and Bat Impact Comment 3 | 3. The Application should include: | ACWE concurs. |

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| | | | a. An outline of the bird and bat avoidance and minimization techniques;<br>b. Mitigation options for bird and bat impacts;<br>c. A clearly defined mitigation proposal with qualified and quantified expected benefits, if DEC determines that an Incidental Take Permit is required;<br>d. Potential monitoring and adaptive management responses and operational adjustments (i.e. appropriate curtailment regimes) to be implemented at the Facility; and<br>e. An outline of a Bird and Bat Conservation Strategy (BBCS) plan, which will describe compliance with the substantive requirements of 6 NYCRR Part 182, as well as measures to avoid, minimize and mitigate impacts to avian and bat species, if DEC determines that an Incidental Take Permit is required. | |
| **208.** | DPS p. 27 | Avian and Bat Impact Comment 4 | 4. The Application should indicate if a curtailment regime is proposed and include:<br>a. Operational details of cut in speed, seasonal dates, temperature and time; and<br>b. Data and a discussion regarding the issues of the economic impact of any required curtailment. | ACWE concurs. |
| **209.** | DPS p. 28 | Wetland Maps Comment 1 | 16 NYCRR §1001.22(i) – Wetland Maps<br>1. Wetland mapping and delineation will comport with the following: | On-site field delineations, performed in accordance with USACE and NYSDEC protocols, will consist of boundary flagging within a 200-foot wide corridor centered on linear Facility components (e.g., access roads, electrical interconnect), within a 250-foot radius of turbines, and within a 200-foot radius of other components such as |

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| | | | a. Maps at a scale of 1:100, construction design scale, depicting the field-delineated wetlands and adjacent areas (within 200 feet of the proposed Facility components) and approximate wetland boundaries and adjacent areas (within 500 feet of proposed Facility components);<br><br>b. On-site field delineations consisting of boundary flagging within a 200-foot wide corridor centered on linear Facility components (e.g., access roads, electrical interconnect), and within a 200-foot radius of turbines and other components such as permanent meteorological towers, O&M building, and substation;<br><br>c. The determination of wetland boundaries during on-site field delineations should be made according to the three-parameter methodology described in the U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North central and Northeastern Region, and the NYSDEC Freshwater Wetlands Delineation Manual (where applicable);<br><br>d. Wetland boundaries should be defined in the field by sequentially numbered pink surveyor's flagging marked "wetland delineation" which can be located using Global Positioning System (GPS) technology with reported sub-meter accuracy;<br><br>e. The delineation report that should be provided to the District Office of the USACE and the Regional NYSDEC office (and included with the Article 10 Application) should include the results of the field delineation (i.e., describe the | permanent meteorological towers, O&M building, and substation. This area will be defined as the Delineation Study Area. Aerial photo interpretation, existing databases/previous delineations, analysis of topography, and estimation based on the results of on-site studies will be used to extend field delineated wetland boundaries out to 500 feet. This area will be defined as the Approximation Study Area and wetlands identified in this way will be referred to as approximate wetlands. Wetlands within 50 meters of mapped NYS Freshwater wetlands will be identified if they fall within the study areas described above.<br><br>Mapping in the Article 10 Application will depict delineated wetlands and streams in the Delineation Study Area and approximated wetlands and streams in the Approximation Study Area. Depending on the extent and number of delineated features that must be depicted, the Applicant will determine the appropriate scale of such mapping. The Application will include, as an Appendix, a stand-alone Wetland and Stream Delineation Report, that will include mapping necessary to depict all delineated features within the Delineation Study Area. |

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| | | | location, size, community type and likely jurisdictional status of all delineated streams and wetlands); and<br><br>f. Aerial photo interpretation, existing databases/previous delineations, and estimation based on the results of on-site studies should be used to extend field delineated wetland boundaries out to 500 feet for mapping purposes. | |
| **210.** | DPS p. 28-19 | Wetland Maps Comment 1 | 2. As described above in 22(i), wetland boundaries between 200 and 500 feet of all Facility components should be approximated and mapped using interpretation of aerial imagery signatures, on-site observations, analysis of topography, existing data bases of hydric soils, and wetland mapping maintained by the National Wetland Inventory (NWI) and NYSDEC. This mapping can then be used to inform an analysis of hydrological connections to off-site wetlands in conformance with 1001.22(l), including those that are state mapped wetlands protected by NYSDEC. All information provided with the Application (including GIS shapefiles of delineated wetlands), along with a site visit conducted during the 2018 growing season, will be used by NYSDEC personnel and the Applicant to determine the full extent of NYSDEC wetland jurisdiction. If final verification of wetland boundaries and jurisdictional determination occurs after the Application is submitted, the Applicant will supplement its discussion of avoidance and minimization in the record. | ACWE concurs, see Response to Comment 127. |
| **211.** | DPS p. 29 | Wetland Descriptions | 16 NYCRR §1001.22(j) – Wetland Descriptions | ACWE concurs |

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| | | | 1. A description of the characteristics and Cowardin classification of each field-delineated wetland, a summary of the field data collected regarding vegetation, soils, and hydrology, and copies of all Wetland Determination Data Forms should be compiled into a Wetland and Stream Delineation Report and appended to the Application. | |
| **212.** | DPS p. 29-30 | Wetland Assessment | 16 NYCRR §1001.22(k) – Wetland Assessment<br>1. A qualitative assessment should be completed for each delineated wetland to assess functions and values based on a methodology similar to The Highway Methodology Workbook Supplement, Wetlands Functions and Values: A Descriptive Approach published by the U.S. Army Corps of Engineers New England District in 1999. The functions/values evaluated using this method will include:<br>a. Groundwater recharge/discharge;<br>b. Flood-flow alteration;<br>c. Fish and shellfish habitat;<br>d. Sediment/toxicant/pathogen retention;<br>e. Nutrient removal;<br>f. Production export;<br>g. Sediment/shoreline stabilization;<br>h. Wildlife habitat;<br>i. Recreation; | ACWE concurs |

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| | | | j. Education/scientific value;<br>k. Uniqueness/heritage;<br>l. Visual quality/aesthetics; and<br>m. Threatened or endangered species habitat. | |
| **213.** | DPS p. 30 | Off-site Wetlands Comment 1 | 16 NYCRR §100.22(l) – Off-site Wetlands<br>1. Analysis of hydrological connections to off-site wetlands supported by mapping as described in 1001.22(i)(2). | ACWE will provide the analysis. |
| **214.** | DPS p. 30 | Off-site Wetlands Comment 2 | 2. Based on evaluation of onsite wetland benefit impacts, consider any implications to related hydrologically or ecologically connected off-site wetlands. | The Application will include the information required under 1001.22(l). |
| **215.** | DPS p. 30- | Identification of Temporary and Permanent Impacts to Wetlands and their Regulated Adjacent Areas Comment 1 | 16 NYCRR §1001.22(m) – Identification of Temporary and Permanent Impacts to Wetlands and their Regulated Adjacent Areas<br>1. A quantification of temporary and permanent impacts to field delineated wetland boundaries (and any state-regulated 100-foot adjacent areas) based on the proposed footprint of all Facility components and associated impact assumptions. | ACWE will provide the quantification in the format described in the Comment 2. |
| **216.** | DPS p. 30 | Identification of Temporary and Permanent Impacts to Wetlands and their Regulated Adjacent | 2. Impacts will be presented in a table that shall:<br>a. Identify the type of impact and associated crossing methodology; | Impacts will be presented in a table that identifies the type of impact and associated crossing methodology, clearly discerning between federal and state wetland (and 100-foot adjacent area) impacts. The table will also include wetland delineation type and corresponding site plan sheet number(s). |

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| | | Areas Comment 2 | b. Clearly discern between federal and state wetland (and 100-foot adjacent area) impacts;<br>c. Include wetland delineation type;<br>d. For each resource explain if it could reasonably be avoided;<br>e. Propose site specific actions to minimize impacts to resources that are not bypassed;<br>f. Propose site specific actions to mitigate impacts to resources that are not bypassed; and<br>g. Identify the corresponding page number on preliminary design drawings depicting the resource and on the mapping required by subsequent item 3. | Avoidance, minimization, and mitigation measures will be addressed in 1001.22(n) as required by the regulations. |
| **217.** | DPS p. 30 | Identification of Temporary and Permanent Impacts to Wetlands and their Regulated Adjacent Areas Comment 3 | 3. Impacts to wetlands should be presented on a separate set of Site Plan drawings at 1":50 scale, showing wetland boundaries, permanent and temporary structures, stream crossings, roads, power interconnects, and the limits of disturbance. | ACWE concurs. |
| **218.** | DPS p. 30 | Identification of Temporary and Permanent Impacts to Wetlands and their Regulated Adjacent Areas Comment 4 | 4. Calculation of impacts to both wetland and 100-foot adjacent areas of state-regulated wetlands should include the type of impact, including permanent or temporary fill or forest conversion, and be provided in table format with associated delineation and NYSDEC code (as assigned at the time the Application is filed). | Comment noted, the Application will contain the requested information. |

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| **219.** | DPS p. 31 | Avoid and Mitigate Wetland Impacts Comment 1 | 16 NYCRR §1001.22(n) – Avoid and Mitigate Wetland Impacts<br><br>1. The Applicant should provide a general discussion of measures considered and a description of methods to be implemented to avoid and mitigate wetland impacts. Measures may include consideration of alternate siting or routing options, special crossing techniques, equipment restrictions, herbicide use restrictions, and erosion and sedimentation control measures. Where impacts are unavoidable, discuss the anticipated mitigation measures to be implemented to offset impacts to wetlands (and any state-regulated 100-foot adjacent areas as warranted). Pursuant to 6 NYCRR 663.5(g), mitigation for impacts to state-regulated wetlands and adjacent areas must meet the following provisions:<br><br>a. The mitigation must occur on or in the immediate vicinity of the Facility;<br><br>b. The area affected by the proposed mitigation must be regulated by the Freshwater Wetlands Act and 6 NYCRR Part 663 after mitigation measures are completed; and<br><br>c. The mitigation must provide substantially the same or more benefits than will be lost through the proposed activity. | The Application will include a general discussion of measures considered, and description of methods to be implemented to avoid and mitigate wetland impacts, rather than a table. Measures may include consideration of alternate siting or routing options, special crossing techniques, equipment restrictions, herbicide use restrictions, and erosion and sedimentation control measures. Where impacts are unavoidable, the anticipated mitigation measures to be implemented to offset impacts to wetlands (and any state-regulated 100-foot adjacent areas as warranted) will be discussed. Should compensatory mitigation be required, the Applicant will prepare a conceptual mitigation plan consistent with the regulatory provisions outlined in this comment. |
| **220.** | DPS p. 31 | Avoid and Mitigate Wetland Impacts Comment 2 | 2. This section of the Application should describe the anticipated Environmental Compliance and Monitoring Program (ECMP) to be implemented during construction to adhere to various permit conditions and protect wetlands, | ACWE concurs. |

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| | | | streams, and other waterbodies. The Facility's ECMP must include an Environmental Monitor(s) during construction and restoration activities, and the duties of the Environmental Monitor should be described. | |
| **221.** | DPS p. 31 | State and Federal Endangered or Threatened Species | 16 NYCRR §1001.22(o) – State and Federal Endangered or Threatened Species<br>1. An identification of New York State and Federally listed T&E species documented within or adjacent to the Facility area, and an Endangered Species Avoidance, Minimization and Mitigation Plan, if needed, should be provided in Exhibit 22(f). | ACWE concurs. |
| **222.** | DPS p. 32 | Invasive Species Control Plan | 16 NYCRR §1001.22(p) – Invasive Species Control Plan<br>1. An Invasive Species Control Plan should be provided in Exhibit 22(b). | ACWE concurs. |
| **223.** | DPS p. 32 | Impacts on Agricultural Resources Comment 1 | 16 NYCRR §1001.22(q) – Impacts on Agricultural Resources<br>1. A quantification and analysis of temporary and permanent impacts to agricultural land based on the proposed footprint of all Facility components and associated impact assumptions. | ACWE concurs |
| **224.** | DPS p. 32 | Impacts on Agricultural Resources Comment 2 | 2. A discussion of potential mitigation, following the most recent edition of guidelines established by the New York State Department of Agriculture and Markets (NYSDAM) | ACWE concurs |

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| | | | will be included. | |
| **225.** | DPS p. 32 | Impacts on Agricultural Resources Comment 3 | 3. A map of the Facility Site showing locations of prime farmland, prime farmland if drained, unique farmland, and farmland of state and local importance will be provided in Exhibit 21. | See Response to Comment 96. |
| **226.** | DPS p. 32 | Impacts on Agricultural Resources Comment 4 | 4. A discussion of methods for identifying drainage tile lines prior to construction, along with restoration of any tile lines impacted by Facility construction activities. | ACWE concurs |
| **227.** | DPS p. 32-33 | Water Resources and Aquatic Ecology<br><br>Groundwater Aquifers and Recharge Areas Comment 1 | Exhibit 23. Water Resources and Aquatic Ecology<br><br>The Applicant indicates that it will provide a map of wells based on information obtained from DEC. DPS Staff recommends that the Applicant clarify whether it will survey landowners regarding private wells in proximity to the proposed Facility. If so, the Applicant's survey materials should include a summary of the Project, contact information and a description of where the well owner can get more information about the Project (i.e. Project website, document repositories, etc.), as well as an invitation to join the Stakeholder List.<br><br>16 NYCRR §1001.23(a)(2) – Groundwater Aquifers and Recharge Areas<br><br>1. The PSS and Application should provide a detailed plan for identifying drinking water wells within 500 feet of the Project Area. Information on water supply wells should be obtained using publicly available data from the NYSDEC | The Application will include a map and well information details for both private and public drinking water wells within the Project Area to the extent available from public resources, including DEC, DOH and EPA. Prior to construction, ACWE will contact owners of property with wells within 500 feet of a Project component to locate and identify the details of any wells located where construction activities could affect such wells (including access roads, underground electric lines and power poles).<br><br>ACWE does not plan to conduct a survey of local residents, businesses and property owners because such a survey would collect information that is neither relevant nor material to the Application review process, whereas ACWE's approach described above will collect the relevant and material information. |

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| | | | Division of Water Resources, Bureau of Water Management, NYS Department of Health, and local water districts and public health departments. The Applicant should distribute a water well survey to local residents, businesses, and property owners to identify the locations of private water supply wells within 500 feet of the Project Area and solicit well construction details, usage patterns, and water quality data, if available. The Applicant should develop a table summarizing the location, depth, usage, and water quality data obtained for all identified public and private water wells.<br><br>The locations of public and private water wells should be verified through field observations where property access rights are obtained by the Applicant. Water well locations should be indicated on maps showing groundwater aquifer and recharge areas and shallow aquifer groundwater flow direction, distinguishing whether each well location is approximate or confirmed. GIS data for the public and private well locations should be provided to DPS Staff. | |
| **228.** | DPS p. 33 | Water Resources and Aquatic Ecology<br><br>Groundwater Aquifers and Recharge Areas Comment 2 | 2. The Application should include a plan for minimizing impacts to well usage in the area, including:<br><br>a. A complete inventory of all identified drinking water wells within 500 feet of the Project Area;<br><br>b. Information on the location, depth and usage patterns of existing public and private wells, as available from the well owners;<br><br>c. Plans to minimize impacts to well productivity and water | ACWE will develop a plan, to be included in Exhibit 23 which includes items (b) through (e). The plan will cover wells which are known to exist or anticipated to exist, due to the presence of residences, commercial structures or similar structures, within 500 feet of a location where construction activities such as excavation, HDD, foundation installation or blasting will take place. |

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| | | | quality;<br>d. Methods for pre- and post-construction water quality monitoring for drinking water wells within 500 feet of any areas of ground disturbance; and<br>e. Complaint notification and resolution procedures, including 24-hour contact information for well owners to report impacts to well productivity and water quality during and following construction activities, including blasting operations. | |
| **229.** | DPS p. 33 | Groundwater Impacts | 16 NYCRR 1001.23(a)(3) – Groundwater Impacts<br>1. The Applicant should perform a detailed assessment of soils, topographic features, and groundwater characteristics in order to anticipate whether dewatering will be required. Areas where existing soils are generally characterized as having low infiltration rates and low topographic relief should be identified. Groundwater data, including groundwater depth, quality and flow direction, should be obtained from publicly available data and during the advancement of geotechnical test borings within the Project Area. Where dewatering is anticipated, the Application should include a detailed description of the proposed dewatering practices and a demonstration of how dewatering will avoid and/or minimize flooding, surface water runoff, and transport of fine-grained soils into existing surface water bodies. Any locations where permanent dewatering will be required should be identified and permanent dewatering practices should be described in | The Application will discuss the potential need for dewatering during construction and operation. Preliminary geotechnical tests will gather information on groundwater levels. |

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| | | | detail. | |
| **230.** | DPS p. 34 | Impacts to Surface Waters | 16 NYCRR 1001.23(b)(4) – Impacts to Surface Waters<br>1. The location of all proposed HDD operations within 500 feet of surface waters, wetlands or existing water supply wells should be identified in the Application. Additionally, a description of measures to avoid and minimize impacts of HDD operations on surface water quality and groundwater quality of the shallow aquifer should be included. | The location of HDD operations will be identified in the preliminary design drawings as described in the response to comments of Exhibit 11. To the extent the water supply wells are identified they will be included within the site plans. |
| **231.** | DPS p. 34 | Stormwater | 16 NYCRR 1001.23(c) – Stormwater<br>1. The Applicant should develop a flood-mitigation plan for construction and operation of the Facility. The plan should identify all flood zones and flood hazard areas within the Project Area and should include a risk assessment and mitigation plan for potential impacts to surface water quality and drinking water supplies in the event of a major flood event during construction. The strategy should address potential risks to facility operation in the event of a major flood and describe how such risks are mitigated by the siting and design of Facility components. | To the extent any Facility components are located in designated flood zones or flood hazard areas, the Applicant will evaluate the potential for related impacts and the corresponding need (if any) for mitigation. |
| **232.** | DPS p. 34 | Visual Impact Assessment Comment 1 | Exhibit 24. Visual Impacts<br>16 NYCRR §1001.24(a) – Visual Impact Assessment<br>1. Section 24, Number 2, on page 24 of the PSS: DPS Staff advises that the proposed limitation on visual resources assessment does not appear to fulfill the regulatory | "Visual resource" as used in 1001.24(a)(11) is not a defined term. The VIA to be included in the Application will include a description of all visual resources that would be affected by the proposed Facility. Visually sensitive resources of statewide significance will be identified within the larger 10-mile Facility study area. As defined in the NYSDEC Program Policy DEP-00-2 Assessing and Mitigating Visual Impacts (NYSDEC, 2000), which define specific types of properties as visually sensitive |

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| | | | requirement at 16 NYCRR §1001.24(a)(11). DPS Staff recommends that the Applicant explain its proposal. | resources of statewide significance, and as applicable to this Facility. In addition, resources of local significance within the 5-mile study area will be identified. These scenic areas include places of concentrated activity such as village centers and heavily used roadways, or landscapes of high aesthetic merit that may be considered important by residents.<br><br>In addition, per the requirements set forth in 16 NYCRR § 1000.24(b)(4), the Applicant will conduct a public outreach to assist in the identification of visually sensitive resources. Initial outreach letters to visual stakeholders regarding locally sensitive sites will be sent prior to conducting the visual field work. A detailed discussion of this process will be included in the VIA and the Article 10 Application. |
| **233.** | DPS p. 34 | Visual Impact Assessment Comment 2 | 2. DPS Staff recommends that this exhibit documents the identification and outreach to visual stakeholders pursuant to 1001.24(b)(4). Any visual stakeholders identified through the Viewpoint Selection process should be provided an opportunity to be added to the master Stakeholder List. In addition, the Applicant should consider hosting an in-person meeting of the visual stakeholders during the viewshed analysis process. | ACWE concurs. |
| **234.** | DPS p. 34- | Effect on Transportation<br><br>Federal Aviation Administration – Notice of Proposed Construction | Exhibit 25. Effect on Transportation<br><br>16 NYCRR §1001.25(f) – Federal Aviation Administration – Notice of Proposed Construction<br><br>1. Section 25, Number 1, on page 24 of the PSS states that, “Section 25(f) will describe the status of FAA and Department of Defense (DoD), if any (emphasized), | With over 2,000 wind turbines operating in the United States Invenergy’s engineering group is very familiar with the data entry process for filing notices with the FAA. ACWE’s application will include information on FAA filings required by 1001.25(f). |

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| | | | airspace reviews." Due to the proposed potential wind turbine heights, ranging from 453 to 586 feet tall, a Notice of Proposed Construction will be required in accordance with 14 CFR Part 77 pursuant to 49 U.S.C. Sec. 44718. Notice criteria by the FAA generally calls for this filing for any structures proposed over 200 feet above ground level. See the following link regarding the online data entry process for formal filing:<br><br>Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) (https://oeaaa.faa.gov/oeaaa/external/portal.jsp). Because this filing is necessary, DPS Staff advises that all requirements of 1001.25(f)(1) through (3) must be included in the Application. | |
| **235.** | DPS p. 35 | Socioeconomic Effects | Exhibit 27. Socioeconomic Effects<br><br>1. To the extent reasonably practicable, the analysis of secondary employment and economic activity will also reflect the economic impacts associated with any changes in the retail price of electricity as well as the economic impacts associated with the cancellation or closure of any new or existing power plants made unnecessary by the added wind capacity of the facility. If such estimates cannot be reasonably made, the applicant shall never the less acknowledge that such secondary employment and economic activity impacts will result from the Project, even though no quantitative estimate has been made. | This request goes beyond the requirements of 1001.27 and would call for speculation about the numerous factors at play. |
| **236.** | DPS p. 35 | Environmental Justice | Exhibit 28. Environmental Justice | The Application will include a map depicting Environmental Justice census blocks |

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| | | | 1. DPS Staff advises that the Applicant should provide a map of the environmental justice communities in relation to the Project facilities.<br><br>2. The Applicant should include a brief description of the specific outreach activities the Applicant has taken to inform these communities about the Project | within the Study and Project Areas. Exhibit 28 will include the requested outreach information. |
| **237.** | DPS p. 35-36 | Site Restoration and Decommissioning<br><br>Decommissioning and Restoration Plan | Exhibit 29. Site Restoration and Decommissioning<br><br>16 NYCRR §1001.29(b) – Decommissioning and Restoration Plan<br><br>1. In addition to the general requirements of 1001.29(b), DPS Staff advises that the Application also include the following:<br><br>a. A detailed estimate to support the proposed decommissioning and site restoration funding (not including any salvage value for cost offset) upon cessation of the Facility based on the expected turbine model(s) to be used and actual decommissioning and site restoration costs from other similar projects, if available;<br><br>b. A section describing that financial assurance in the full amount of the decommissioning and site restoration estimate will be provided in the form of letters of credit to be held by the Towns of Arcade, Centerville, Rushford, Freedom, Farmersville, and Yorkshire (if applicable). The Applicant, Towns, and DPS Staff will work together towards finding an acceptable form of letter of credit; and<br><br>c. The Applicant shall include in the site restoration and | Exhibit 29 will include the requested cost estimate; describe the type of financial security to be provided pursuant to host community agreements; and describe the notification procedures included in the host community agreements. |

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| | | | decommissioning plan, a procedure and schedule for notifying the Towns and landowners prior to decommissioning and site restoration activities. | |
| **238.** | DPS p. 36 | Local Laws and Ordinances | Exhibit 31. Local Laws and Ordinances<br>1. DPS Staff requests that the Applicant provide complete copies of local laws and ordinances, including attachments and reference documents including maps, figures, tables of area requirements, etc., with the Application. | Exhibit 31 will include copies of those local laws and ordinances, and referenced documents, that are applicable to the Project and all components of the Project, but it will not include copies of those local laws that have no bearing on the Project. |
| **239.** | DPS p. 36 | State Laws and Regulations | Exhibit 32. State Laws and Regulations<br>1. The list of State Authorizations provided at PSS Section VIII should be revised to include:<br>a. NYSDOT Use and Occupancy permits for facilities utilizing State Highway Rights-of-way; and<br>b. Approvals pursuant to Public Service Law §68, 69 and 70, as appropriate.<br>2. The NYSDPS is authorized to issue Clean Water Act §401 Water Quality Certifications for facilities certificated under PSL Article 10, rather than NYSDEC. | Exhibit 32 will include the referenced laws and permits. |
| **240.** | DPS p. 36 | Other Applications and Filings | Exhibit 33. Other Applications and Filings<br>1. DPS Staff advises that the Application should include an explanation of the associated Article VII major electric transmission facility, including a preliminary schedule for submittal of the Article VII Application. | Exhibit 31 will include a general description of the transmission facility and a map depicting its location. |

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| **241.** | DPS p. 36 | Electric and Magnetic Fields | Exhibit 35. Electric and Magnetic Fields<br>1. The Applicant is required to provide the magnetic fields "base case" calculations, according to 1001.35(e) of Public Service Law 164(1), regardless of the existing infrastructure. | The Application will include calculations or assumptions on the base case EMF levels. |
| **John S. Hill, Town of Freedom Council, 2/8/18**<br>Public Comment No. 6 | | | | |
| **242.** | Public Comment No. 6 p. 1 | Safety | Emergency evacuation for most industrial wind turbines is 500 meters or 1640 feet. This means any dwelling or road must be evacuated during any emergency at turbine. They want 1.2 times height of turbine (720 feet) for roads and 1200 feet to nonparticipants outside wall. That means I could lose use of my house and/or lose all emergency service at my house during emergencies. Ice throw or blade failure is another issue. Using the standard project distance formula and Sin 20^ for air resistance and height difference of 800 feet and blade tip speed 300 Ft/sec, I can have projectiles of ice or blade failure traveling over 3000 feet. | Exhibit 15 will address risk of ice throw and discuss procedures situations where a wind turbine requires a visit from emergency responders. |
| **243.** | Public Comment No. 6 p. 1 | Low Frequency and Infrasound | Invenergy is trying to mask the low frequency and infrasound problem by using dBA instead of just dB. They say if you can't hear it, it is not a problem. Please note that NYS is spending millions of dollars for thruway sound barriers for homes and businesses that were built after thruway. The US Embassy in Cuba had to be evacuated | Exhibits 15 and 19 will address low frequency noise from the Project. |

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| | | | because of low frequency sound waves. Low frequency noise has been shown to cause increased anxiety, constant headaches, sleep deprivation, and linked to increased suicide. | |
| **244.** | Public Comment No. 6 p. 2 | Noise | We live in a rural area, so sound at night especially could be annoying down to 35 dB. They want 45 dBA. It is impossible to predict where noise will travel. The only thing known is that closer to source means greater potential for noise issues. Invenergy has a very poor track record of correcting problems from their industrial wind turbines in western NY. | The Application will include ambient noise measurements that produce the data required by 16 NYCRR § 1001.19. The noise propagation modelling makes worst case assumptions which will account for propagation in all directions.<br>There have been noise complaints at Invenergy's operating projects |
| **245.** | Public Comment No. 6 p. 2 | Birds and Bats | We have a large population of Canadian geese, along with birds of prey and bats that will suffer greatly if turbines are installed. | U.S. Fish and Wildlife Service and NYS DEC have rigorous requirements for avoiding, minimizing and mitigating impacts on birds and bats. |
| **246.** | Public Comment No. 6 p. 2 | Emergency Communications | Our towns rely heavily on over the air communications for phone, internet, and entertainment. If an emergency arises, wind turbines may interfere with getting help. They have no plan to overcome this issue. | The Application (Exhibit 26) will identify all communication methods used by residents and emergency responders and describe the measures that will be taken to avoid interference. |
| | **Mark and Bonnie Kitson 2/12/18 Public Comment No. 8** | | | |
| **247.** | Kitson p. 1 | Landowner Interests | • At one time we thought landowners should have a right to | • The decisions of where and how many windmills will be located in any municipality |

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| | | | decide for themselves if they wanted a windmill on their property. It is our property, after all, and we should have the same right as other landowners. After further investigation, we believe that windmills in Centerville and Rushford, NY will have a negative affect on the community as a whole. Therefore, we no longer support the idea that individual landowners, with agreements with Invenergy, should decide where and how many windmills will be located in Centerville and Rushford. The community as a whole should decide in a fair unbiased manner.<br><br>• We are not opposed to energy generated from wind, but believe that wind parks should be located in less-populated or industrial areas where local residents and seasonal residents are not impacted by the negative health and aesthetic affects. Energy generated in the USA should be shared across states. The energy needs of New York State should not have to be generated totally within the borders of New York State.<br><br>We are opposed to the building of the Alle-Catt Wind Farm. We own property in both Centerville and Rushford. As seasonal residents of the town of Centerville since 1965, and landowners within the wind farm boundaries in Rushford, NY, our four land parcels and one residence will be impacted by this wind farm. We do not want to live near windmills. It is within the realm of possibility that we, or our children will become permanent residents of Centerville, NY at some time in the future.<br><br>We are opposed for many reasons, including the disruption of the tranquility of this quiet farming community, noise | are not solely within the power of Invenergy and its lessors to control. Those decisions are made by the State Board on Electric Generation Siting and the Environment (Siting Board) based importantly on municipal zoning laws. The Article 10 process affords ample opportunity for municipal governments and local residents to influence the Siting Board's decision.<br><br>• It is the policy of New York State to increase the amount of renewable energy as a proportion of the energy consumed within the State.<br><br>• The Article 10 process is a rigorous review process aimed at identifying all potential adverse impacts, including those listed in the comment, and ensuring such impacts are evaluated and then avoided, minimized and/or mitigated. |

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| | | | creation, the negative visual impact of the windmills, shadow flicker, the creation of storm water drainage issues, reduced land values and the impact on birds and especially bats. | |
| **248.** | Kitson p. 2 | Storm Water Drainage | Storm Water Drainage: Poorly controlled storm water drainage will cause stream pollution, erosion and sedimentation, not only in our community, but also in communities downstream unrelated to the Alle-Catt Wind Farm. If the windmills are built, this will demand the creation of permanent and temporary construction sites, new roads, driveways and changes to the maintenance of existing roads. The town of Centerville currently fails in its ability to properly size pipes to address storm water drainage. This is caused primarily by a shortage of funds within the town and highway budget. There is also a shortage of town personnel trained in storm water drainage pipe locating and sizing. Many of its pipes are too small and cannot handle severe storms, let alone 25, 50, 100, or 1000-year storms. An increased number of severe storms should be forecast into the windmill model due to the threat of global warming. We may have already seen this affect in stronger than normal storms that have washed out roadways, within the past year, in the town of Centerville.<br><br>The reality of global warning should not be challenged, as this is the premise for which the windmill park is being built; to create “clean” energy to offset the use of fossil fuels, which in affect, create global warming. Experts should be required, from the state of NY, to forecast and resize, all | ACWE agrees that global warming is a threat and that increased storm activity is a likely consequence. All construction activity will have to comply with a Storm Water Protection Plan approved by DEC, which will use the most current data on the predicted size of storm events. ACWE will execute a road use agreement with the Towns in the Project Area, which will impose maintenance responsibility on ACWE. |

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| | | | new and existing road bridges and culvert pipes impacted by the windmill project. The additional town budget expenses required for the maintenance and upkeep to these bridges and culvert pipes should be forecast, including inflation, should the wind park be approved. These additional expenses should be paid out of the All-Catt Wind Farm budget for the duration of the windmill project; which is in the range of at least 20 – 40 years.<br><br>Failing to account for town expense inflation would be a gross planning error and would most likely result in an unacceptable future financial burden on the towns of Centerville and Rushford. The standards for storm water drainage within the Alle-Catt Wind Farm should be in compliance with the laws, rules and guidelines of the State of New York and should not be ignored. Any additional expenses, resulting from bringing the town into compliance, should be the burden of the Alle-Catt Wind Farm. We do not need to add to our storm water drainage issues by adding windmills! | |
| **249.** | Kitson p. 2-3 | Bats and Birds | Bats and Birds: The risk to birds and bats is significant as they could be killed when crashing into swinging blades. It is not normal for birds to encounter rotating swinging blades in nature within the confines of the town of Centerville and Rushford. We, along with experts in the state of New York, have witnessed severe decline in our bat population. This is documented in at least one issue of the “Conservationist” magazine printed by the state of NY. This recent decline in the population of bats is the result of | Impacts on birds and bats is a topic of particular concern to DPS and DEC who will require that the Application demonstrate compliance with avoidance, minimization and mitigation standards. |

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| | | | White-nose syndrome. This makes nearly all bat species in the state of NY threatened. The blades of the windmills will have a negative impact on the already threatened population of bats. This interrelationship between bats, windmills and the Alle-Catt Wind Farm should be researched to determine the extent of the windmills' impact on bat populations. Bats are necessary to help control mosquitos along with many other species of insects. The impact of death to birds caused by the Alle-Catt Wind Farm should also be studied. We need to keep the bird and enhance the bat populations we have now! | |
| **250.** | Kitson p. 3 | Seasonal Residents and the Negative Impact on Property Values | Seasonal Residents and the Negative Impact on Property Values: We are very alarmed about your lack of concern within the PSS for seasonal residents and future home sites. Who is to say that we, or our inheriting children or grand children, in the future, would not decide to make our seasonal residence in Centerville, NY, our/their permanent residence. We might sell our property to someone who would make it his or her permanent residence? We would like to have the option to build on our land in Rushford. The impact of the Alle-Catt Wind Farm will be the same for seasonal residents as well as permanent residents. We will have the same environment while we are there. There is no differentiation for seasonal versus permanent residents regarding taxes paid. We pay a constantly increasing amount of property taxes as do those permanently residing in these towns of Centerville and Rushford.<br><br>Furthermore, we have three parcels of vacant land, which | • ACWE recognizes that there is a range of uses that are grouped together as "seasonal" residences. ACWE will propose standards that distinguish among that range. |

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| | | | are very close to a proposed windmill site. If we wanted to build a house on that property, in our opinion, it would be too close to the proposed windmill, given the Noise, Shadow Flicker, and Visual negativity. The mere presence of the windmill reduces the options for future capital gain on this property. We are certain others in the community will find their selling options in the future limited by the presence of windmills in the community. There is no proposed compensation for this negative affect, which impacts the majority of Centerville and Rushford residents, other than the possibly of reducing local property taxes. This is not a fair trade of benefits for seasonal or permanent residents! Seasonal residents count! | • Setback requirements are imposed with reference to parcel boundaries and distinguish between "participating" and "non-participating" parcels. However, in identifying the effects of noise and shadow flicker on residences, ACWE will limit its assessments to existing residences and those that have filed building permit applications. |
| **251.** | Kitson p. 3 | Impact on Nature of Centerville and Rushford | Changing the Core Culture of the Town of Centerville and Rushford: If the windmills are installed, a significant part of the economy will change from a farming, recreation and forestry economy to an industrial economy. In an industrial community it is normal to hear noise daily. Centerville is a very quiet, tranquil community and many people come here to live and recreate for that very reason. This is a "Right to Farm" community where people want to support farmers in their quest to make a living on their land or land they have rented. It will be a financial opportunity for some farmers or other landowners who sign an agreement to have windmills or transmission lines placed on or near their property. However, the rest of the community will be negatively impacted everyday, most without significant financial gain, for the rest of the time they live here. This is not fair to the community. Currently Centerville is a great place to live for | New York State grants local municipalities' ample authority to determine the character of their communities through comprehensive planning and adoption of land use laws. Both Centerville and Rushford have adopted laws permitting Wind Energy Facilities and imposing requirements to control noise and other factors. One of the advantages of wind energy facilities is that they are fully compatible with agriculture, forestry and outdoor recreational uses. |

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| | | | people who want to “get away from it all”. This is not a city, there is not a single traffic light in the town. The town is a good example of rural living, with mainly farms, recreational home sites, lumber mills and an Amish community. Centerville is the location a great number of “Camps” (weekend/seasonal homes) for weekend “get aways” for hunting and recreation. The owners of these camps contribute to the economy of Centerville and Rushford. Centerville has very few businesses other than farms and lumber mills. We like the way our community is now! | |
| **252.** | Kitson p. 4 | Views | Views (What we see every day): Where once there was a beautiful view, there may be monstrous (almost 600 ft.) industrial electric-generating machines. Sometimes the windmills will be moving, sometimes not. But, always the windmills will be obstructing the view we have come to love, which is now simple hills, trees, fields and an unobstructed blue or clouded sky, or stars at night. With the windmills, there will no longer be clear starry nights but big, red, blinking warning lights to warn airplanes not to crash into them. We have beautiful views and starry nights now! | WTGs of the ACWE facility will be visible from locations within the Project Area. By selecting materials and colors with low visibility the impact will be minimized but not eliminated. Visibility from sensitive areas and resources will be documented and assessed in Exhibit 24. |
| **253.** | Kitson p. 4 | Sound (Audible, Low Frequency, Infrasound) | Sound (Audible, Low Frequency, Infrasound): Where once when you opened the outside door on a calm silent night or soundless calm summer morning, you may now hear the sounds of the windmills. The sounds of the windmills may temporarily be drown out by other sounds, but the windmill sound will return when the other sounds go away. It is scary to know that some sounds are clearly heard, but that | Impacts from the sound created by wind turbines gets rigorous attention in the Article 10 review process. Goals for avoiding or minimizing sound levels on residential receptors are set to be fully protective of human health. Exhibit 19 will provide information, in the form of noise contour maps, that will enable residents to determine the predicted worst case noise levels at their locations. |

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| | | | other sounds generated by the windmills are not readily heard and can potentially hurt you. The negative affects occur after you hear the sounds over and over again without being able to get away from them. Landowners should not be required to hear theses sounds anywhere on their property. We can hear the wonderful sounds we like now!<br><br>In the city, when we hear unwanted constant noise, we call it noise pollution and there are laws to stop people who create unwanted noise that invades others space. If a neighbor has a barking dog that will not stop barking and the owner ignores requests to quiet the dog, the owner can be fined. It is common courtesy not to make noise that bothers your neighbors. But, it seems that with the windmills, common courtesy is ignored and your neighbor just has to suffer the consequences. No one should have to have a windmill located close enough to their property line where these sounds can be detected. Windmills should not be allowed to be built where any sound is in range of a neighbor's property line. All neighbors should be informed of the level of noise to which they will be exposed. The current standard distance from a property or a building is not far enough. This type of noise is different than "farm sounds" or temporary construction noises. These noises do not fall within the "Right to Farm" boundaries. Changes in turbine design result in changes to the resulting sound the windmills make. These noises have never been in the Centerville community and they do not have to be in our community in the future. These are industrial noises. We do | |

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| | | | not have to worry about windmill noise now! | |
| **254.** | Kitson p. 4-5 | Shadow Flicker | Shadow Flicker: Looking out across the hills and valleys of Centerville or Rushford the view is unobstructed by anything but silos, telephone poles, barns, or an occasional telephone or radio tower. All these structures stay in one place. They don't move and they don't cause health problems. If the Alle-Catt Wind Farm is approved, this view will be a thing of the past. Almost in any direction you look, there will be an almost 600 ft. tower with a huge swinging blade that will go around and around. The width and length of the blades are so huge that they will create moving shadows across the landscape and within your eyesight. Depending on what you are doing, you may not able to get away from the shadow flicker. If shadow flicker is coming into your house through a window, and you need to be in that room, what do you do? Shadow flicker is well documented. It is a negative attribute of windmills. Windmills should not be allowed to be built where the shadow flicker is in range of a neighbor's property line. We should not be forced to endure this negative side-effect of windmills. All landowners should be told of their exposure to shadow flicker or any noise created, before this project is approved. If more noises or shadow flicker are detected after the building of the windmills than forecast, the windmill should be shut down and removed or relocated. All land owners in the community should be informed of the extent of their exposure to noise (heard and unheard) and shadow flicker prior to the approval of the windmill project. | Shadow flicker can occur when the sun is low in the sky and shining in the direction of a wind turbine. Siting Board requirements limit shadow flicker to no more than thirty hours per year at any residence. The Application will identify locations where shadow flicker will be experienced and measures to mitigate it. |

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| | | | We have a granddaughter who has epilepsy. How can we protect her when she comes to visit from the effects of shadow flicker. It is documented that people with epilepsy can have negative reactions to shadow flicker. We do not have to worry about reactions to shadow flicker now! | |
| **255.** | Kitson p. 5 | Ground vibration | Ground vibration: With windmills this big are there not also ground vibration issues? Has this phenomenon been researched? What are the long-term affects on soil, groundwater and bedrock stability? Does a more compact soil result in causing poor drainage and poor plant growth on agricultural soils? A farmer would want to know! We do not have ground vibration now! | As required by Article 10 regulations, the Application will address questions of ground vibration. ACWE is not aware of ground vibration issues at operating wind projects in New York. |
| **256.** | Kitson p. 5 | Who Decides | Who Decides: Who approves the building of the Alle-Catt Wind Farm within the community of Centerville and Rushford? No town board member should be allowed to vote on this issue if that person has signed an agreement with Invenergy to have a windmill(s) or transmission line(s) or is benefiting from any financial gain from the windmill project (this would include other family members). If by eliminating board members with a conflict of interest, there is a situation where the town is not properly represented, an alternate method of decision making should be approved with a non-bias method. The opinions of all citizens, not just the town board(s) should be heard on this issue. Any attempt to limit any residents' ability to voice their opinion on this issue should be investigated; both pro and con. A simple town vote by registered voters within the | Article 10 of the New York State Public Service Law places the decision on whether to grant the required authorization to build and operate on the State Board on Electric Generation Siting and the Environment, a State board composed of the heads of the Department of Public Service, Department of Environmental Conservation, Department of Health, Energy Research and Development Authority and Department of Economic Development plus two ad hoc members who reside in the area. Town boards are encouraged to participate as parties to the proceeding but local authority to grant permits is suspended. All residents have the opportunity to offer their views and to participate more formally if they choose to. |

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| | | | town might be the fairest method. The approval or denial of the Alle-Catt Wind Farm should be decided in an unbiased fair process! | |
| **257.** | Kitson p. 5-6 | Real Estate Values | Real Estate Values: Set back distances are not far enough from property lines. Even if a building does not exist now. Landowners should have setback distances as if there was a building present at the edge of their entire property. Landowners should not be limited by windmills relative to property value or to the future of potential land sales, leases or rentals. Windmills should be set back so that no sound (heard or unheard), or shadow flicker encroaches on their property. This is why there are so many wind farms are located out in the western states, because they are located away from people. Will Centerville or Rushford continue to be a desirable location for "Camps" if windmills are installed? We would expect that the presence of windmills will eliminate many potential "Camp" real estate deals. We do not have to worry about windmill set back distances now! | Property line setbacks are fundamentally a local planning issue that balance the interests of different types landowners. Project Area towns have adopted wind energy laws that reflect their interests in maintaining the communities as farming-oriented communities. |
| **258.** | Kitson p. 6 | Benefit to the community | Benefit to the community: One way to compensate the community, in some small way, is to take responsibility for some of the town tax. The town tax is used (as I understand it) mainly for snow plowing and road maintenance including storm water drainage. It would be a bad deal to agree to return the town roads to their previous condition after the windmill construction is completed, because they are in such terrible shape now. The tax | Comment noted. Exhibit 27 will analyze economic benefits to the towns. |

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| | | | benefit should be equal to the previous Noble wind farm proposal. Whatever tax benefit is agreed upon, annual compensation should be forecast and paid with forecast inflation included. Remember a contract signed for 20 years with an option for renewal for an additional 20 years is a 40-year contract. We have no idea what a dollar will be worth 40 years in the future. A clause should be included to make up for actual inflation that increases above forecast inflation. The tax benefit to the community should accomplish two objectives; lower town taxes for individuals within the community and build better roads, eliminate dirt roads and maintain them properly for the next 40 years (including storm water drainage with properly sized bridges and culverts). If the Alle-Catt Wind Farm is approved, it is important that the whole community benefits! | |
| **259.** | Kitson p. 6 | Applicant's Community Relations | Invenergy: We have found the Invenergy representatives to be vague and deliberately omitting information that we want to know. True we have been absent form local meeting due to our seasonal resident status, however Invenergy representatives have contacted us. When asking for specific information about the locations of specific windmill sites and how close those proposed sites will be to our property, the answers are avoided. They ask us to consider signing an agreement, but will not provide specific information that would form the basis for making an intelligent decision. It appears Invenergy wants to keep us uninformed until the project is approved and then we will just have to live with what is decided. We do not have a trusting relationship with Invenergy! It seems if you are not | ACWE has shown proposed wind turbine locations on maps at two open houses in August 2017, on the project website, and in the PSS. Large (wall-size) versions of these maps are on display at the local office Invenergy maintains in Village of Arcade at the intersection of Liberty and Main Streets. ACWE encourages the commenter to call or visit the local office to learn where wind turbines are preliminarily planned. |

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| | | | signing an agreement, then you are entitled to less information. This is not acceptable since everyone in Centerville and Rushford will be affected, if the project is approved. If we cannot trust Invenergy, if they are not transparent, how can we support the Alle-Catt Wind Farm? | |
| **Thomas P. Keysa 1/23/18 Email**<br>Public Comment No. 3 | | | | |
| **260.** | Public Comment No. 3 | Airport Interference | I can see that while located within the study area Keysa Airport, NY79 is not within the project area. That being said, I want to go on record that I do not want any wind generator towers sited in the vicinity of my airport that would interfere with safe flight operations. Please be advised that there are horizontal and vertical setbacks set by the Federal Aviation Administration (FAA) for siting antenna towers and any other high obstacles such as wind generators in and around any airport that would pose a hazard to general aviation. If additional wind generators are being planned in and around Keysa Airport, NY79, they need to comply with the FAA setback regulations. | ACWE will comply with FAA regulations. The measures taken to comply will be described in Exhibit 25. |
| **Jeff Tutuska, Jeff Tutuska Graphic Design**<br>2/21/18 | | | | |
| **261.** | Public Comment Doc No. 14 | Local economic impacts | I'm writing to express my concerns of Invenergy's Alle-Catt project. Their PSS overview claims the project to be a boost to local economies. Millions in taxpayer IDA funds | • Industrial Development Agency funds will not be spent on the ACWE Project. |

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| | | | will be spent. A few local contractors will get site work for about a year and only a hand full of full time jobs will be created.<br><br>The rest of the work will go to specialized contractors from outside this area. The energy that is created is far from clean when you consider how much energy & material is used to construct them, compared to what they produce. The estimated $78 million in property tax would be four times that if it were not a PILOT agreement, where they will pay far less than the residents that live here. Of that payment the schools would get half of it with the county getting most of the rest. The towns that have to deal with the project get the smallest portion.<br><br>The residents will get only a small decrease in taxes. After Invenergy's projects, there are always lawsuits from residents when turbines are built too close to their homes. Lawsuits are due to the noise, vibration and shadow flicker that impacts health and wellbeing. Also included in these lawsuits are loss of property value, violation of noise ordinances and Invenergy's refusal to abate or mitigate measures to reduce these problems post construction. I argue the economic benefits of the project versus the cost to taxpayers, ratepayers and especially those living in the aftermath. Fewer people will want to move here or improve the property they already own. Many have left their properties after poorly planned wind projects at a great loss. Some have been forced to abandon homes that they cannot sell. This area of New York already has more renewable power than needed. Most of NY's renewable | • PILOT and host community revenues should be compared to a "no-build" alternative, because the Project would not be economically viable without such agreements.<br><br>The commenter's characterization of lawsuits is inaccurate. Surveys of communities after projects have been built have shown high degrees of satisfaction with the projects. Refer to studies done in Lewis County after completion of the Maple Ridge wind farm near Lowville, NY. |

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| | | Impacts on electric grid | power is created in WNY or the North Country, and most of it is used downstate.<br><br>The current electrical grid is already overburdened and we are grounding hydropower to accept fluctuating wind power. I question how affordable or green wind power is when every MW has to be backed up by fossil fuel plants when the wind doesn't blow. Most wind power is created in the coldest months and evenings when power is needed least. Wind power's success has been based on taxpayer / ratepayer subsidies and carbon credits. If it were not for these funds, turbines could not stand on their own. Any environmental benefits should be weighed against environmental impacts. Nearly every point made in Invenergy's FAQ page can be disputed with multiple facts regarding diminished property values, added utility costs, noise and health impacts when turbines are built too close. I feel the PSS did not adequately reach those in the project area. In talking to friends and neighbors in Centerville, only a few had seen the postcard and none knew they had a short time to respond with their concerns. Very few people in these rural areas have decent internet access, limiting ability to be informed of the project. I believe the same problem exists in the other towns involved. Invenergy should have to do more to inform us. Due to this lack of outreach, I feel those with concerns need time to reach out to others that may want intervenors status. As you have read, I am not a fan of wind power in this populated of an area, but am not opposed to a project that properly protects our health, safety and property values. | • See Response to Comment 19. |

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| | **Tracey Wood 2/28/18 Public Comment No. 29-30** | | | |
| **262.** | Public Comment No. 29-30 | Safety | Invenergy seems to think that a 1200ft setback is sufficient for a windmill this tall. that is only twice the height! What about ice build up flinging off of a blade? What if there is an emergency and the area has to be shut down? The emergency evacuation for standard wind turbines is 1640ft. This is NOT a standard wind turbine. | Exhibit 15 will evaluate the setback distances required to avoid the risk of ice throw. |
| **263.** | Public Comment No. 29-30 | Property Values | Now, what about property values? Sure, we may end up with free town taxes, but can they guarantee that the single largest investment in my life will not be affected? | Please see Response to Comment #16. Studies show property values are not adversely affected by wind farms. |
| **264.** | Public Comment No. 29-30 | Health | What about cell and internet services? What about flickering? What if they install these and I get sick from infrasound… | Exhibit 15 and 19 will address the measures to minimize shadow flicker and to avoid infrasound risks. |
| **265.** | Public Comment No. 29-30 | Moratorium | I feel that more studies need to be done. I would like to see a moratorium placed on this project until more research can be done on windmills this size. Again, I have no objection to wind turbines, if they are in non-residential areas where they won't cause any potential adverse effects. | New York State has conducted a generic environmental impact assessment and has permitted numerous projects now in operation that collectively demonstrate that wind energy facilities can operate safely in rural environments. |