Eight Point Wind
Case No. 16-F-0062
Petition to Amend Certificate
Attachment A

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Definitions

The following definitions will be used throughout the Amendment to describe various areas or boundaries of the Project:

- **Application**: The Article 10 Application submitted for the Eight Point Wind Energy Center.
- **Certificate Conditions:** The Project-specific Conditions attached to the Order Granting the Certificate of Environmental Compatibility and Public Need for the Eight Point Wind Energy Center on August 20, 2019.
- **Certified Project**: The Eight Point Wind Energy Center Project as Certified through the Order Issuing a Certificate of Environmental Compatibility and Public Need on August 20, 2019.
- **Component or Facility**: An individual piece of equipment or improvement of the Project, including a wind turbine, access road, laydown area, collection substation, collection line, O&M building and/or meteorological tower.
- **Limits of Disturbance**: The boundary within which all construction, materials storage, grading, landscaping, and any other activities related to site preparation, construction, operation, maintenance, and decommissioning take place as a result of the Project.
- **Modified Project:** The Eight Point Wind Energy Center Project as proposed in the Amendment herein.
- **Project Area**: The 15,295-acre area within a boundary encompassing all of the Project components within the Towns of West Union and Greenwood as shown on Figure 2. This boundary includes both participating land parcels and non-participating land parcels.
- **Siting Board:** New York State's Board on Electric Generation Siting and the Environment
- **Study Area**: The area within at least a 5-mile distance of the Project Area.

Acronyms

CY	cubic yards
DOD	Department of Defense
FAA	Federal Aviation Administration
GE	General Electric
kV	kilovolt
LOD	Limits of Disturbance
MW	megawatt
NIA	Noise Impact Assessment
NYSDEC	New York State Department of Environmental Conservation
NYSEG	New York State Electric & Gas
NYSDOH	New York State Department of Health
NYSORPS	New York State Office of Real Property Services
O&M	Operations & Maintenance
POI	point of interconnection
PSL	Public Service Law
T#	turbine number
VIA	Visual Impact Assessment
VSA	visual study area

1.0 INTRODUCTION

Eight Point Wind, LLC (Eight Point Wind or Certificate Holder) applied for a Certificate of Environmental Compatibility and Public Need with the New York State Board on Electric Generation Siting and the Environment (Siting Board) pursuant to Public Service Law (PSL) Article 10 to construct and operate the Eight Point Wind Energy Center (Project) in the Towns of Greenwood and West Union, Steuben County, New York (Case No. 16-F-0062). The Article 10 Application (Application) for the Project was filed on November 29, 2017. Following submittal of the Application, Eight Point Wind submitted two Supplements to the Application (April 10, 2018 and August 10, 2018) and the Application was deemed compliant on September 6, 2018. The Siting Board granted a Certificate of Environmental Compatibility and Public Need, with Conditions (Certificate), on August 20, 2019 and Eight Point Wind filed written acceptance of the Certificate on September 17, 2019.

As described in the Application, Eight Point Wind will also construct an approximately 16.5-mile overhead 115 kilovolt (kV) transmission line. The transmission line will interconnect to new point of interconnection (POI) facilities within the New York State Electric & Gas (NYSEG) existing 115 kV Bennett Substation in Hornellsville, New York. Because the transmission line is greater than 100 kV and the length exceeds 10 miles, it has been permitted separately under Article VII of the New York PSL (Case No. 18-T-0202) and is not part of the proposed modifications herein. A Certificate was issued for the transmission line on October 18, 2019.

Since acceptance of the Article 10 Certificate, Eight Point Wind has determined that modifications are necessary to construct and operate the Project. Wind turbine technology has evolved since the Application was filed in 2017 which has increased the efficiency of individual turbines resulting in the generation of additional megawatts (MW) of energy per turbine. This increase in efficiency would allow the Project to reduce the number of turbines while still meeting the 101.8 MW of production required. Having fewer turbines in the Project Area, as proposed in this modification, reduces the overall environmental impacts associated with the Certified Project design. Pursuant to PSL § 162 and NYCRR 1000.16, Eight Point Wind requests that the Certificate be amended to allow for the installation of fewer, moderately taller turbines (70.5 feet higher), resultant minor positional shifts for a portion of the turbines within previously approved locations, and associated access roads and collection route decreases and adjustments.

By using the Modified Project, with the new turbines described below, the Project would utilize six fewer turbines, reducing the overall number of access roads and collection line circuits throughout the Project Area. This Amendment includes supporting documentation and studies to demonstrate that the Modified Project will not significantly increase or create new and different impacts compared to those previously found to meet applicable standards by the Siting Board at the time the Certificate was issued. The Chair of the Siting Board has the authority to grant amendments to a Certificate of Environmental Compatibility and Public Need after consultation with the permanent members of the Siting Board provided no party opposes such request within 30 days. A hearing is not required unless the Secretary determines that an amendment is "likely to result in (i) any significant adverse environmental impacts of such facility, determined according to 6 NYCRR §617.7(c), in comparison to such impacts of the facility as proposed or approved, or (ii) the identification of an adverse environmental impact not included in the application."

The regulations at 16 NYCRR §1000.16(b)(1) and (2) require a petition to "describe the amendments proposed and the relevant engineering design, performance or operational changes proposed, with supporting documentation to describe the nature of the changes caused by or related to the amendment," and include "the data and information required by this Subchapter that would otherwise be necessary to support an application for a certificate." The Department of Public Service Staff (DPS Staff), in consultation with the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), is tasked with determining whether the proposed modifications would result in a significant adverse increase to environmental impacts as compared to the Certified Project. 16 NYCRR §1000.16(a).

As shown in the subsequent sections, figures, and appendices herein, the modifications proposed for the Project, on balance, are minimal in nature and do not result in adverse environmental impacts. The updated, more efficient turbine technology proposed for the Modified Project results in an overall decrease in turbines required for the Project and a decrease in the total access road acreage and linear feet of collection lines required. Eight Point Wind was able to site each of the turbines proposed for the Modified Project within previously Certified turbine sites, which ensures that these turbine locations have been evaluated extensively as part of the original Article 10 Application. Additionally, by shifting actual turbine locations within the previously Certified turbine sites, the Certificate Holder was able to comply with the previously Certified setbacks for the Project.

With the Modified Project overall permanent and temporary impacts to forestland and successional old-field community types have decreased as compared to the Certified Project. Temporary impacts to forestland have decreased by 14.46 acres and permanent impacts have decreased by 1.87 acres. Successional old-field community impacts have decreased by 0.20 acres for permanent impacts and by 2.5 acres for temporary impacts. Permanent impacts to successional shrubland have decreased by 0.13 acres, while temporary impacts to successional shrubland have increased by 2.13 acres to accommodate the proposed shifts in Project Components.

Land classifications as presented by the New York State Office of Real Property Services (NYSORPS) were also evaluated. Changes to these land use classifications as part of the Modified Project include the same number of turbines in agricultural land and a decrease in the number of turbines proposed on vacant land and residential land. The overall impacts due to the construction of access roads and collection lines has decreased as part of the Modified Project and, subsequently, the impacts to each land use classification (i.e., agricultural, vacant, and residential) have decreased. The only land use classification type that will have an increase in impacts due to collection line adjustments is a negligible increase to vacant land.

There are no incremental adverse impacts to streams or wetlands. Permanent wetland and stream impacts have decreased with the Modified Project compared to the Certified Project. Permanent wetland impacts have been reduced from 0.047 acres to 0.0104 acres. The temporary impacts have also been reduced from 4.3 acres to 2.80 acres. Permanent stream impacts have been reduced from 169 linear feet to 80 linear feet. Temporary stream impacts have also been reduced from 3,701 linear feet to 2,130 linear feet.

As described further in regard to Exhibit 24, below, the Modified Project will result in changes in predicted visibility of the Project; however, these changes are minimal to negligible. The viewshed mapping analysis indicates virtually no new visible areas within a half mile and that percent visibility decreases. As the maps show, the overall 0.5% visibility increase for the Modified Project appears to occur at locations farther out where many turbine views would be diminished because of distance.

Certified setbacks and property line noise limits will continue to be met, as well all other Certificate Conditions, except one: the sound power level of the new turbine model will be slightly higher

than the Certified Project (Certificate Condition 64(c)(ii)). As explained in Exhibit 19 below, this change is of no consequence because the Project will still comply with the property line noise limits previously approved in the Certificate Conditions. Pointedly, those noise limits, agreed to by the Certificate Holder during the Article 10 proceeding, are stricter than those approved by the Siting Board for other wind projects following issuance of the Certificate.

An updated shadow flicker analysis was prepared for the Modified Project and it shows only one non-participating residence that could exceed the 30-hour annual limit contained in Certificate Condition 31 (Appendix B). That condition also requires the preparation of a Shadow Flicker Impacts Analysis, Control, Minimization and Mitigation Plan to be submitted in the Compliance Filing. That Plan includes the opportunity for a non-participating residence to avail itself of the Compliant Resolution Plan to address the noted shadow flicker issues, with various options to resolve complaints. In addition, the updated shadow flicker analysis attached hereto was overly conservative because it assumed 31 turbines (inclusive of alternate turbines) rather than 25 turbines. Accordingly, considering that Certificate Condition 31 anticipates possible exceedances of the 30 hour annual limit, and that the Mitigation Plan to be submitted in the Compliance Filing will model the actual Modified Project with six fewer turbines, no adverse shadow flicker impacts will be caused compared to the Certified Project.

For all these reasons, the Modified Project will not create any significant adverse impacts, new or otherwise, compared to the Certified Project, and accordingly, the Modified Project does not rise to the level of a “revision”, and hearings are not required.

2.0 PROJECT DESCRIPTION

(a) Certified Project Description

The Certified Project consists of up to 31 utility-scale wind turbines located on land either purchased or leased from owners of private property located in the Towns of Greenwood and West Union in Steuben County, New York. The Project will have a maximum generating capability of 101.8 MW. As shown in the Application, Eight Point Wind indicated that the Project would likely utilize primarily General Electric (GE) 3.43 MW wind turbines and four GE 2.3 MW wind turbines. The total height for the GE 3.43 MW model is 178.5 meters (585.6 feet) and the total height for the GE 2.3 MW model is 163 meters (534.8 feet).

The Certified Project also includes approximately 33.8 miles of underground 34.5 kV collection line, 0.7 miles of 34.5 kV overhead collection line, and a total of 14.2 miles of temporary and permanent access roads. The onsite 34.5 kV collection lines will gather power to a new centrally located Project collection substation where the power will be transformed to 115 kV and connected to the Article VII certified interconnection transmission line. The substation would occupy approximately 0.5 acres of an existing open field in the Town of Greenwood adjacent to an operations and maintenance (O&M) building. This building will consist of an approximately 5,000 square foot single story structure. The Certified Project also includes up to two meteorological towers that will be steel lattice towers approximately 361 feet in height. Figure 1 included herein presents the Project as Certified.

(b) Modified Project Description

As proposed, the Modified Project will consist of up to 25 utility-scale wind turbines located in the Towns of Greenwood and West Union in Steuben County. The Project Area has not been modified from that presented in the Application. There are two turbine models proposed at this time, Siemens 5.0 MW and GE 2.52 MW. The dimensions of these turbines are outlined in Table 1, below. Of the 25 total turbines proposed in the Modified Project, the majority of the turbines (19) are proposed to be Siemens 5.0 and the remaining six are proposed to be GE 2.52. In addition, the Modified Project includes six alternate turbine locations, five of which are proposed as Siemens 5.0 turbines and one of which is proposed as a GE 2.52 turbine.

Table 1. Turbine Models Proposed for Modified Project

Turbine Model	Hub Height (meters/feet)	Rotor Diameter (meters/feet)	Tip Height (meters/feet)	Nameplate Capacity (MW)
Siemens 5.0-145	127.5 meters/ 418.3 feet	145 meters/ 475.7 feet	200 meters/ 656.1 feet	5.0
GE 2.52-116	90 meters/ 295.3 feet	116 meters/ 380.6 feet	148 meters/ 485.6 feet	2.52

The Project modifications proposed herein as part of the Amendment include the following:

- Change in turbine technology to utilize two newly available, more efficient turbine models:
  - 19 Siemens 5.0 MW turbines (656.1 feet) to replace 19 GE 3.43 MW turbines (585.6 feet), and
  - 6 GE 2.52 MW (485.6 feet) to replace 5 GE 3.43 MW turbines and 1 GE 2.3 MW turbine (534.8 feet).
- Updated foundation design to support new turbine technology;
- Decrease in the total number of turbines required for the Project to meet 101.8 MW of capacity from 31 turbines to 25 turbines;
- Designation of six alternate turbine locations;
- Locational shifts of 20 turbines within previously Certified turbine sites to accommodate setback and other siting requirements resulting from use of new turbine technology (locational shifts are greater than 25 feet but no more than 339 feet); and
- Decrease in the access road acreage and linear feet of collection lines, as well as layout adjustments, to accommodate the shift in turbine locations and technology.

Each of these proposed modifications is described in further detail below and in the corresponding Exhibit sections. As a result of the decrease in the number of turbines required for the Project and subsequent shifts in turbine placement within the previously Certified sites, the turbines were renumbered to more appropriately match the new turbine designations (including alternates) and

for ease of understanding during Project operation. This renumbering is reflected on Figure 2 (Modified Project) and on the Preliminary Design Drawings included as Appendix A. Eight Point Wind evaluated the considerations as required under Article 10 to ensure that the Modified Project and required ancillary feature modifications (e.g., collection routing and access road locations) resulted in no significant adverse change in environmental impacts from the Project as Certified or identification of an adverse environmental impact not included in the Application (16 NYCRR Part 1000.2(ak)). By using the same Project Area and previously Certified turbine sites, Eight Point Wind updated the appropriate studies relevant to each of the turbine sites, for the Modified Project.

Table 2, below, describes updates to the Project layout and turbine numbering, with associated locational shifts of turbines within the previously Certified sites, as part of the Modified Project. Although some of the turbine locations have shifted, all the turbines proposed as part of the Modified Project, including the alternate turbines, are sited within the general turbine sites that were approved as part of the Certified Project. There are no new turbine sites proposed from the Certified Project. Of the currently proposed 31 turbine locations (inclusive of alternates), 11 have been moved slightly (less than 25 feet), and the locations of 20 turbines have been shifted, compared to the Certified Project layout. The relocated turbines were moved on average 113 feet, and only eight turbines were moved more than 100 feet, the largest move being 339 feet. Most of the shifts were made to accommodate setbacks from adjacent property lines and public roads, as described further below in the discussion related to Exhibit 6.

Table 2. Summary of Project Component Updates[1]

Project Component	Update from Certified Project
Turbine 1	Moved 339 feet northeast
Turbine 2	Slight movement
Turbine 3	Moved 108 feet southeast
Turbine 4	Moved 182 feet northwest
Turbine 5	Slight movement
Turbine 6	Moved 32 feet northwest
Turbine 7	Moved 88 feet southeast
Turbine 8	Moved 90 feet west

Table 2. Summary of Project Component Updates[1]

Project Component	Update from Certified Project
Turbine 9	Moved 137 feet northwest
Turbine 10 (previously Turbine Alt 1)	Moved 88 feet south
Turbine 11 (previously Turbine 12)	Moved 81 feet south
Turbine 12 (previously Turbine 14)	Moved 189 feet southwest
Turbine 13 (previously Turbine 17)	Moved 91 feet east
Turbine 14 (previously Turbine Alt 2)	Moved 104 feet southwest
Turbine 15 (previously Turbine 21)	Slight movement
Turbine 16 (previously Turbine 22)	Slight movement
Turbine 17 (previously Turbine Alt 4)	Slight movement
Turbine 18 (previously Turbine 23)	Slight movement
Turbine 19 (previously Turbine 24)	Moved 167 feet north
Turbine 20 (previously Turbine 25)	Moved 31 feet southwest
Turbine 21 (previously Turbine 26)	Moved 217 feet south
Turbine 22 (previously Turbine 28)	Moved 48 feet south
Turbine 23 (previously Turbine 29)	Moved 30 feet northeast
Turbine 24 (previously Turbine 30)	Slight movement
Turbine 25 (previously Turbine 31)	Moved 92 feet southwest
Turbine Alt 1 (previously Turbine 20)	Slight movement
Turbine Alt 2 (previously Turbine 19)	Moved 98 feet north
Turbine Alt 3 (previously Turbine 18)	Slight movement
Turbine Alt 4 (previously Turbine 16)	Moved 52 feet northeast
Turbine Alt 5 (previously Turbine 10)	Slight movement
Turbine Alt 6 (previously Turbine 27)	Slight movement
Previously labeled Turbines 11, 13, 15, and Alt 3	These turbines have been removed from the current layout.

[1] Each of the turbine sites proposed in the Modified Project are turbine sites which were Certified as part of the Certified Project. The updates include locational shifts within the previously Certified turbine sites to accommodate setbacks and other siting requirements.

3.0 EXHIBITS AND STUDIES APPLICABLE TO PROPOSED MODIFICATIONS

The proposed modifications to the Project were evaluated in light of those resource considerations required to be evaluated under Article 10. The subsequent analyses are provided herein and are described by corresponding Exhibit in the Article 10 Application. Exhibits or resource-specific studies that were performed are outlined in Table 3, below. Exhibit numbers or resource-specific studies that are not included herein were deemed either not to be affected by the proposed modifications to the Project or not applicable.

Table 3. List of Updated Exhibits and Studies Applicable to Project Modifications

Application Exhibit Number	Exhibit Name	Updated and/or Supporting Documentation
Exhibit 3	Location of Facilities	Project mapping
Exhibit 4	Land Use	Evaluation of land use types and impacts
Exhibit 6	Wind Power Facilities	Setbacks analysis
Exhibit 11	Preliminary Design Drawings	Design drawing set showing turbine layout modifications
Exhibit 15	Public Health and Safety	Updated shadow flicker analysis
Exhibit 19	Noise and Vibration	Updated Noise Impact Assessment (NIA)
Exhibit 21	Geology, Seismology and Soils	Cut and fill calculations and soils evaluation
Exhibit 22	Terrestrial Ecology and Wetlands	Impacts to terrestrial cover types and wetlands
Exhibit 23	Water Resources and Aquatic Ecology	Stream impacts
Exhibit 24	Visual Impacts	Updated viewshed analysis and photographic simulations
Exhibit 25	Effect on Transportation	Transportation route review and numbering update

Table 3. List of Updated Exhibits and Studies Applicable to Project Modifications

Application Exhibit Number	Exhibit Name	Updated and/or Supporting Documentation
Exhibit 26	Effect on Communication	Review of communications
Exhibit 31	Local Laws and Ordinances	Local law review
Exhibit 34	Electric Interconnection	Updated collection lines

(a) Exhibit 3: Location of Facilities (§1001.3)

Figure 3-1 from the Application has been revised and is included herein. Figure 3-1 shows the Project Area along with the location of the major electric generation components and interconnection facilities associated with the Project. These components include the wind turbines, access roads, collection lines, laydown/staging areas, collection substation, O&M building, and permanent meteorological towers. As originally identified in the Application, all Project features will be located within the defined Project Area, with the possible exception of existing roads requiring improvements in order to facilitate the transportation of wind turbine components to the Project. The Certificate Holder continues to evaluate potential off-site haul routes and will present the final locations of the selected routes in the Compliance Filing. The Project Area has not changed since the Application was filed.

The Project Area, on-site non-Article VII interconnections, and all ancillary features are located entirely within the Towns of Greenwood and West Union in Steuben County. The Modified Project remains within the Canisteo-Greenwood Central School District and the Whitesville Central School District, as presented in the Application. As the total number of turbines required for the Project has decreased and the alternate designations have been modified, an updated Table 3-1, below, summarizes the number of turbines proposed within each jurisdiction in the Modified Project layout as compared to the Certified Project layout.

Updated Table 3-1. Number of Turbines by Municipality/School District

Town	Number of Turbines	
	Certified Project	Modified Project
Town of Greenwood	12 (1 Alternate)	10 (1 Alternate)
Town of West Union	19 (3 Alternates)	15 (5 Alternates)
County		**Number of Turbines**
Steuben County	31 (4 Alternates)	25 (6 Alternates)
School District		**Number of Turbines**
Canisteo-Greenwood Central School District	18 (3 Alternates)	14 (3 Alternates)
Whitesville Central School District	13 (1 Alternate)	11 (3 Alternates)

(b) Exhibit 4: Land Use (§1001.4)

In this section, updated impacts to land use are presented, as applicable. The Project Area and Study Area for the Project have not changed since it was Certified. Land Use Classification codes were obtained from the Steuben County and Allegany County Offices of Real Property Services to classify land use within the Study Area (5-mile radius from all Facility Components). Land Use Classification Codes describe the primary use of each parcel and are consistent throughout New York State. The Land Use Classification Code Categories developed by the New York State Office of Real Property Services (NYSORPS) that occur within the Study Area include agricultural, residential, vacant land, commercial, recreation and entertainment, community services, industrial, public services, and wild, forested, conservation lands, and public parks. The land use classification codes that were used to calculate the impacts described below are the same as those used in the Application to maintain consistency.

The Project Area was also reviewed to determine direct impacts to agricultural land, including mapped Agricultural Districts, as part of the Project. As the Project Area has not changed, the Modified Project crosses the same mapped Agricultural Districts as in the Certified Project. Specific Project impacts to mapped Agricultural Districts within the Project Area have been updated and are included in an updated Table 4-1, below.

Updated Table 4-1. Project Facility Impacts to Agricultural Districts

County	Agricultural District	Temporary Soil Impact (acres)		Permanent Soil Impact (acres)	
		Certified Project	Modified Project	Certified Project	Modified Project
Steuben	District 1	90.9	96.39	3.7	3.04
Steuben	District 10	231.7	261.47	13.2	13.54
-	**Total**	**322.6**	**367.86**	**16.9**	**16.58**

As shown in Updated Table 4-1 above, the permanent soil impact within Agricultural Districts due to the Modified Project is 0.32 acres less than the Certified Project. As with the Certified Project, these impacts are entirely within Steuben County Agricultural Districts 1 and 10. While overall permanent soil impacts within mapped Agricultural Districts have decreased, temporary impacts have increased to accommodate the slightly modified Limits of Disturbance (LOD) that has been adjusted in some areas to accommodate the larger turbines. The temporary nature of these impacts, as well as the overall decrease in permanent soil impacts, does not result in a significant change or impact from the Certified Project. Of the impacted land that occurs within mapped Agricultural Districts in Steuben County, less than one percent is on land classified as prime farmland, which represents a decrease from the Certified Project. Mitigation measures to protect and restore agricultural land within the Project Area will be undertaken during and after the construction phase of the Project.

The minimal incremental impact to Agricultural Districts as part of the Modified Project are temporary in nature, related to use for temporary access roads and work locations, which will be restored following construction. The utility mapping, tax parcel mapping, and zoning information is also consistent with what was presented in the Application for the Certified Project.

As discussed in the Application, the Project was Certified to be located on the following land use types, according to the NYSORPS classification: Agricultural, Residential, and Vacant Land. The impacts to these land types are included in updated Table 4-4, below. The remaining land use types within the Project Area will not be affected by Project construction and operation.

Updated Table 4-4. Impacts to Land Use Types (with Alternates)

Land Use Type	No. of Turbines		Access Roads (acres)		Collection Circuits (miles)	
	Certified Project	Modified Project	Certified Project	Modified Project	Certified Project	Modified Project
Agricultural Land	18	18	13.3	12.8	16.6	14.27
Vacant Land	13	10	11.6	9.46	13.0	13.21
Residential Land	4	3	3.3	2.76	4.2	2.69
Total	**35**	**31**	**28.2**	**25.0**	**33.8**	**30.17**

As a conservative measure, Eight Point Wind has included the alternate turbines in the evaluation of land use types from both the Certified Project (four alternates) and the Modified Project (six alternates). As shown in Table 4-4 above, the majority of Project Facilities (e.g., turbines, access roads, and collection lines) are located on land categorized by NYSORPS as Agricultural Land.

The number of turbines proposed in land classified as Agricultural Land remains the same for the Modified Project as for the Certified Project, at a total of 18 turbines. The number of turbines proposed in vacant land has decreased by three, for a total of ten turbines in the Modified Project, and the number of turbines in land classified as Residential Land has decreased by one for a total of three turbines in the Modified Project.

As a result of the decrease in number of turbines, the overall acreage of access roads and mileage of collection lines for the Project has also decreased. There is a reduction of 3.2 acres of access roads and 3.6 miles of collection required as part of the Modified Project.

As described in further detail in Exhibit 31 below, the applicable local laws for the Towns of Greenwood and West Union have not changed since the Project was Certified. The Towns of Greenwood and West Union, as well as Steuben County do not have comprehensive plans and therefore, there has been no change in planned land use since the Project was Certified. Additionally, the Steuben County Agricultural and Farmland Protection Plan has not been updated since Project Certification.

As can be seen from the Land Use Analysis above, the changes in impact to any specific land use type have decreased due to the decreased number of turbines, fewer access roads, and fewer collection lines. Additionally, the Project Area and parcels under option for the Project have remained the same as compared to the Certified Project.

(c) Exhibit 6: Wind Power Facilities (§1001.6)

As previously noted, the Modified Project requires fewer turbines than the Certified Project due to the incorporation of new, more efficient turbine technology. Eight Point Wind was able to site the new turbines within previously Certified turbine sites with slight modifications or locational shifts in some locations to account for setbacks and other permitting considerations and requirements.

As with the Certified Project, the Modified Project meets and, in some instances, exceeds the Town's setback standards. The Applicant will continue to utilize a standard setback of at least 1,400 feet from nearest off-site residence and 1.2 times the turbine height from roads, property lines and structures, which complies with setback requirements of all participating municipalities and with the Certificate Conditions. The Applicant will also site turbines no closer than 1.5 times turbine height in relation to electric transmission lines operating at 115 kV or greater (including the proposed Article VII facilities) as required by the Certificate Conditions. The locational adjustments made to turbines in the Modified Project are required in order to comply with the setbacks as Certified.

Additionally, the setback requirements specified by the Town of Greenwood and the Town of West Union have not changed since the Project received certification. An updated Table 6-1, below, presents the setbacks applied to the Project. The table has been updated to reflect the new turbine technology; however, as noted, the setbacks have not changed as part of the Modified Project. An updated Figure 6-1 is attached herein, which demonstrates the setbacks as applied to each updated turbine location and numbering.

Updated Table 6-1. Setback Requirements and Recommendations[1]

Setback Requirement	Town of Greenwood	Town of West Union	Certified Project	Modified Project
Residences	1,400 feet from the nearest off-site residence	1,400 feet from the nearest off-site residence	1,400 feet from nearest residence	1,400 feet from nearest residence
Site Boundary/property lines[2]	1.1 times the turbine height	1.2 times the turbine height	1.2 times the turbine height (702.7 feet for GE-3.4 turbines, 641.8 feet for GE-2.3 turbines) plus 10 meters for non-participating parcels	1.2 times the turbine height (789.4 feet for Siemens-5.0 turbines, 582.7 feet for GE-2.52 turbines) plus 10 meters for non-participating parcels
Other built structures (barns, etc.)	1.5 times the turbine height	1.5 times the turbine height	1.5 times the turbine height (878.4 feet for GE-3.4 turbines, 802.2 feet for GE-2.3 turbines)	1.5 times the turbine height (986.7 feet for Siemens-5.0 turbines, 728.3 feet for GE-2.52 turbines)
Roads	1.1 times the turbine height	1.2 times the turbine height	1.2 times the turbine height (702.7 feet for GE-3.4 turbines, 641.8 feet for GE-2.3 turbines)	1.2 times the turbine height (789.4 feet for Siemens-5.0 turbines, 582.7 feet for GE-2.52 turbines)
Aboveground Utilities	1.1 times the turbine height	1.2 times the turbine height	1.2 times the turbine height (702.7 feet for GE-3.4 turbines, 641.8 feet for GE-2.3 turbines)	1.2 times the turbine height (789.4 feet for Siemens-5.0 turbines, 582.7 feet for GE-2.52 turbines)
Wetlands	No specific ordinance	100 feet from State Identified Wetlands	100 feet from State Identified Wetlands	100 feet from State Identified Wetlands
Noise related setbacks	Adequate distance from existing residence that the statistical sound pressure level generated by a WTG shall not exceed L10-	Adequate distance from existing residence that the statistical sound pressure level generated by a WTG shall not exceed L10-50 dBA measured	Maximum noise limit of 42 dBA L_{eq} (8-hour) at any permanent or seasonal non-participant residence and 52 dBA L_{eq} (8-hour)	Maximum noise limit of 42 dBA L_{eq} (8-hour) at any permanent or seasonal non-participant residence and 52 dBA L_{eq} (8-hour)

Updated Table 6-1. Setback Requirements and Recommendations[1]

Setback Requirement	Town of Greenwood	Town of West Union	Certified Project	Modified Project
	50 dBA measured at the nearest residence located off the Site. If the ambient sound pressure level exceeds 50 dBA, the standard shall be ambient dBA plus 6 dBA	at the nearest residence located off the Site. If the ambient sound pressure level exceeds 50 dBA, the standard shall be ambient dBA plus 6 dBA	for any participant residence.	for any participant residence.

[1] Turbine height is defined as the maximum height when the blade is aligned vertically with the tower and at its highest position.

As specified in Certificate Condition 44, third party certification for the turbine models described herein will be submitted as a Compliance Filing.

(d) Exhibit 11: Preliminary Design Drawings (§1001.11)

Appendix A includes Preliminary Design Drawings which reflect the proposed modifications to the Project as described herein. Table 11-1, below, identifies only those Project Components that are proposed to be modified and the corresponding sheet number(s) for reference.

Table 11-1. Modifications to Project Design Drawings

Project Component	Revised Project Sheet(s)
Turbines (including updated turbine numbering)	All AR-Series Sheets
Turbine Foundation	Detail Sheets (D-12 and D-13)
Met Towers	N/A[1]
Access Roads	All AR-Series Sheets

Table 11-1. Modifications to Project Design Drawings

Project Component	Revised Project Sheet(s)
Electrical Collector	All C-Series Sheets
O&M Building	N/A[1]
Laydown Yards	N/A[1]

[1]The Modified Project does not cause changes to the Met Towers, collection substation, O&M Building, or Laydown Yards.

Based on the modifications to the turbines described herein, the subsequent Project Component adjustments (e.g., collection line routing and access roads) are also reflected in the Preliminary Design Drawings. These components were updated when necessary to accommodate the required turbine adjustments and include locations where access roads and collection routes have been removed due to the decrease in turbines required for the Project.

The concrete spread foot type foundations proposed for the Project, which were one of two foundation types proposed in the Certified Project, are discussed further in Section 21 below. Additionally, as with the Certified Project, turbine component delivery and related logistic considerations are still being finalized for a Compliance Filing, as the origination of supplies has not been determined; please refer to Section 25 below for further discussion on transportation and delivery considerations evaluated as part of this modification.

(e) Exhibit 15: Public Health and Safety (§1001.15)

Eight Point Wind has prepared an updated Shadow Flicker Analysis, as Appendix B, to address the potential impacts to the public that may result from the Modified Project's two new turbine models and the subsequent increase in height, and reduction in height, depending upon the turbine model, from the Certified Project.

The Certified Project includes a design goal of 30 hours per year of expected shadow flicker at non-participating residences (Certificate Condition #31). The attached shadow flicker modeling

analysis evaluated both of the turbine models proposed in the Modified Project and, as a conservative measure, Eight Point Wind determined that this “worst case” scenario would include 24 Siemens-5.0 turbines and seven GE-2.52 turbines. This “worst case” reflects 31 turbine locations, including the six alternate locations; however, as described herein, only 25 turbines will be installed for the Modified Project. Using this combination of turbine models, the duration of shadow flicker was calculated at 763 discrete modeling points.

Based upon the updated shadow flicker analysis for the Modified Project (Appendix B), the Modified Project results in only one non-participating receptor exceeding 30 hours of shadow flicker annually as compared to the Certified Project. This one receptor has a maximum annual duration of 32 hours, 24 minutes. As noted above, updated shadow flicker analysis is a “worst case” scenario that includes all alternate turbine locations. Certificate Condition 31 also requires the preparation of a Shadow Flicker Impacts Analysis, Control, Minimization and Mitigation Plan to be submitted in the Compliance Filing. That Plan includes the opportunity for a non-participating residence to avail itself of the Complaint Resolution Plan to address the noted shadow flicker issues, with various options to resolve complaints. Accordingly, considering that Certificate Condition 31 anticipates possible exceedances of the 30 hour annual limit, that the Mitigation Plan to be submitted in the Compliance Filing will address any possible exceedances with mitigation, that the Certificate Holder could also include new landowners as Project participants, and that the final modelling for the Compliance Filing of the actual Modified Project with six fewer turbines could likely show no exceedances, no adverse shadow flicker impacts will be caused compared to the Certified Project.

It is worth noting that Certificate Condition 34(i) requires that “…the Certificate Holder shall implement a curtailment regime during the period of July 1 through October 1 requiring a minimum curtailment 30 minutes prior to sunset through 30 minutes after sunrise, when ambient air temperature is 50 degrees Fahrenheit or greater and when wind speed is equal to or less than 5.5 m/s. This regime will be implemented at all turbines for the life of the Project.” This condition is not proposed to be modified. These reduced operational hours were not taken into account in the Shadow Flicker Analysis’s Table 6-2 operational hours in the original Application, nor in the updated analysis herein and thus the shadow flicker estimates during this 3-month period are likely overestimated.

(f) Exhibit 19: Noise and Vibration (§1001.19)

Eight Point Wind has prepared a Noise Impact Assessment (NIA), for the Modified Project, appended hereto as Appendix C, to address the potential impacts to the public that may result from the change in turbine models from the Application. The noise study was conducted to evaluate the two turbine models and it was determined that the "worst case" scenario would include 24 Siemens-5.0 turbines and seven GE-2.52 turbines. It is "worst case" because 31 turbine locations were included in the NIA (including the six alternate locations), whereas only 25 turbines are proposed as part of the Modified Project.

The Project will comply with its Certificate limit of a maximum noise limit of 42 dBA L_{eq} (8-hour) at any permanent or seasonal non-participant residence and 52 dBA L_{eq} (8-hour) for any participant residence existing as of the issuance date of the Certificate (Certificate Condition 73(a)). Some noise mitigation on up to ten of the Siemens-5.0 wind turbines may be required to meet the 42 dBA limit at non-participating residences.

The Project will comply with its Certificate limit of a maximum annual equivalent sound level of 40 dBA L(night-outside) at any permanent or seasonal non-participating residence and 50 dBA L(night-outside) at any permanent or seasonal participating residence. The Project will also comply with the 55 dBA Leq (8-hour) limit across any portion of a non-participating property. In addition, the Project will meet the 65 dB Leq (1-hour) limit from the 16 Hz, 31.5 Hz, and 63 Hz octave bands outside any existing non-participating residence. The wind turbines will not produce any audible prominent tones. The Project will also meet the limit of 40 dBA Leq (1-hour) at the outside of any non-participating residence from the collector substation equipment, even if subject to the 5 dBA tonal penalty. No noise mitigation is needed to show compliance with these limits.

The proposed Siemens-5.0 turbines will have a slightly higher sound power level (the unredacted Siemens sound power level is contained in the NIA filed under trade secret protection) whereas Certificate Condition 64(c)(ii) limits the sound power level to 106 dBA. As the Modified Project will comply with all other Certificate Conditions, the modified sound power level has no acoustical consequence for the public. Accordingly, the Certificate Holder is hereby requesting that this condition be modified to reflect the new sound power level. In the alternative, the limit could be eliminated as has been done by the Siting Board in the following Article 10 decisions: Deer River

Wind Energy project (Case 16-F-0267-Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions, dated June 30, 2020); the Alle-Cat Wind Energy project (Case 17-F-0282-Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions, dated June 3, 2020); the Canisteo Wind Energy project (Case 16-F-0205-Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions, dated March 13, 2020); the Bluestone Wind project (Case 16-F-0559-Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions, dated December 16, 2019); the Number Three Wind project (Case 16-F-0328-Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions, dated November 12, 2019); the Baron Winds project (Case No. 15-F-0122-Order Granting Certificate of Environmental Compatibility and Public Need, With Conditions, dated September 12, 2019).

For details of the revised noise study see Appendix C.

(g) Exhibit 21: Geology, Seismology, and Soils (§1001.21)

As a result of the removal of turbines and adjustments to the foundations, the estimated quantity of imported material has changed and is described in Table 21-3, below. The estimated quantity of gravel that will be imported to the site has decreased by 5,934 cubic yards (CY; or 12.5%) due to a decrease in total number of proposed turbines. This is a conservative estimate that includes the gravel needed for all 31 proposed turbine locations, inclusive of six alternate turbine locations that will not be constructed. The total surface material and concrete pavement quantities have not changed as both are associated with the Project's O&M building and collection substation.

Updated Table 21-3. Estimated Quantity of Imported Material (with Alternates)

Imported Material	Quantity (yd^3)	
	Certified Project	Modified Project
Gravel	47,300	41,366
Surface Material	325	325
Concrete Pavement (O&M Building)	75	75
Total	47,700	41,766

The Modified Project is proposing one foundation type, gravity spread foot, for the turbine construction. The gravity spread foot foundation is the same foundation type as described in Exhibit 21 of the Application and as Certified. The foundation design involved supporting a turbine on a large inverted "T" concrete pour. This is a conventional method of turbine foundation construction. In a conventional spread footing, the vertical loads and overturning moments applied at the top of the foundation are resisted by the weight of the spread footing and bearing on the base of the foundation, and the horizontal loads are resisted by friction at the base of the spread footing. Sheets D-12 and D-13 of Appendix A depict a standard design of a gravity spread foot foundation for each turbine model. The Patrick & Henderson Tensionless Pier (PTHP) design that was also described in the Application is no longer being considered for the Modified Project.

As noted in the Modified Project Description above, the turbines have shifted slightly within the previously Certified locations and the turbine numbers have been updated as described in Table 2, above. Table 21-5, below, summarizing the soil types at each turbine location has been updated to reflect the design changes and updated soil mapping since the time of the Application.

Updated Table 21-5. Summary of Soil Types

Turbine Location	Map Unit Symbol	Map Unit Name
T1	MrB	Morris channery silt loam, 2-8% slopes
T2	MrB	Morris channery silt loam, 2-8% slopes
T3	OgC	Oquaga channery silt loam, 12-20% slopes
T4	OgB	Oquaga channery silt loam, 3-12% slopes
T5	MrC	Morris channery silt loam, 8-15% slopes
T6	OgB	Oquaga channery silt loam, 3-12% slopes
T7	MdB	Mardin channery silt loam, 2-8% slopes
T8	OgB	Oquaga channery silt loam, 3-12% slopes
T9	OgB	Oquaga channery silt loam, 3-12% slopes
T10	WoB	Wellsboro channery silt loam, 2-8% slopes
T11	MdB	Mardin channery silt loam, 2-8% slopes

Updated Table 21-5. Summary of Soil Types

Turbine Location	Map Unit Symbol	Map Unit Name
T12	MdB	Mardin channery silt loam, 2-8% slopes
T13	ARC	Arnot channery silt loam, 2-20% slopes
T14	MdB	Mardin channery silt loam, 2-8% slopes
T15	LaB	Lackawanna channery silt loam, 3-12% slopes
T16	MrB	Morris channery silt loam, 2-8% slopes
T17	WoB	Wellsboro channery silt loam, 2-8% slopes
T18	WoB	Wellsboro channery silt loam, 2-8% slopes
T19	WoB	Wellsboro channery silt loam, 2-8% slopes
T20	OgC	Oquaga channery silt loam, 12-20% slopes
T21	MrB	Morris channery silt loam, 2-8% slopes
T22	MSB	Morris channery silt loam, gently sloping, extremely stony
T23	OgB	Oquaga channery silt loam, 3-12% slopes
T24	OgB	Oquaga channery silt loam, 3-12% slopes
T25	OgB	Oquaga channery silt loam, 3-12% slopes
Alt1	WoB	Wellsboro channery silt loam, 2-8% slopes
Alt2	WoC	Wellsboro channery silt loam, 8-15% slopes
Alt3	OgB	Oquaga channery silt loam, 3-12% slopes
Alt4	WoC	Wellsboro channery silt loam, 8-5% slopes
Alt5	OgB	Oquaga channery silt loam, 3-12% slopes
Alt6	WoB	Wellsboro channery silt loam, 2-8% slopes

Turbines in the Modified Project will be constructed on the majority of the same soils as the Certified Project. As a result of slight turbine shifts and updated soils mapping for Steuben County, turbines will be constructed on three additional soil types, MrC, ARC, and MSB, described above. This will not result in any changes to the construction impact of, or method for, the turbines in these locations. The soil type mapping for the entirety of the Project Area is depicted in Revised Figure 21-2 included herein. A revised Figure 21-1 depicting slopes within the Project Area and a

revised Figure 21-3 depicting depth to bedrock within the Project Area have also been updated to reflect the Modified Project and are included herein.

(h) Exhibit 22: Terrestrial Ecology and Wetlands (§1001.22)

Calculation of specific impacts to vegetative communities within the Project Area are based on the assumed disturbance areas assigned to each Project Component described in Table 22-2, below. This table and the associated impact assumptions are consistent with those submitted in the Application for the Project, with the exception of the "Area of Permanent Impact" for wind turbine (construction and operation) which was reduced from 0.065 acre per turbine to 0.061 acre per turbine.

Updated Table 22-2. Impact Assumptions

Project Components	Vegetative Clearing Area	Soil Disturbance Area	Area of Permanent Impact
Wind Turbine (construction and operation)	Variable for each turbine; approx. 250' radius	Variable for each turbine; approx. 250' radius	0.061 acre per turbine (pedestal plus access – no crane pad)[1]
Access Road	60' wide per linear foot of road	30' wide per linear foot of road	16' wide per linear foot of road
115 kV Transmission Line	100' wide per linear foot of line	0.23 acres per support structure	0.01 acre per support structure
Buried Electric Collection Line	Up to 50' wide per linear foot of line	Up to 50' wide per linear foot of line	None
Overhead Electrical Collection Line	Up to 50' wide per linear foot of line	Up to 50' wide per linear foot of line	0.01 acre per support structure
Meteorological Towers	1 acre per tower	1 acre per tower	0.01 acre per tower
O&M Building	2.5 acres	2.0 acres	1.75 acres
Staging/Laydown Areas	10 – 15 acres per staging area	10 – 15 acres per staging area	None

Updated Table 22-2. Impact Assumptions

Project Components	Vegetative Clearing Area	Soil Disturbance Area	Area of Permanent Impact
Collection Substation	1.0 acre	1.0 acre	0.6 acre

[1] The Area of Permanent Impact for wind turbine construction and operation in the Application was assumed to be 0.065 acre per turbine (pedestal plus access – no crane pad).

Based upon Table 22-2 above, and a reduction in turbines for the Modified Project, Table 22-3, below, has been updated to reflect the temporary and permanent impacts due to Project construction and operation. As noted above, although the Project Area has not changed – the LOD has been adjusted and expanded in some areas to accommodate the larger turbines. These LOD adjustments are a conservative measure that account for the new requirements to deliver the turbines to the site; however, the impact areas, access road widths, etc., required for the turbines have not changed from the Certified Project. The LOD has been widened in some areas to alert contractors and those accessing the site that the turbines, during construction, may extend beyond the originally identified LOD. The extents of the LOD do not indicate that the entire area within the LOD will be impacted. Accordingly, the projected increase in impacts to agricultural land shown below in Table 22-3 may not occur at all. Any incremental impacts to agricultural land are temporary and will be restored upon the completion of construction.

Updated Table 22-3. Vegetation Impact Calculations[1]

Cover Type	Temporary Impact (Acres)		Permanent Loss (Acres)		Total Impact (Acres)	
	Certified Project	Modified Project	Certified Project	Modified Project	Certified Project	Modified Project
Forestland	147.7	133.24	8.6	6.73	156.3	139.97
Successional Shrubland	10.3	12.45	0.6	0.47	10.9	12.92
Successional Old-Field	19	16.50	1.3	1.10	20.3	17.6
Open Water	0	0	0	0	0	0

Updated Table 22-3. Vegetation Impact Calculations[1]

Cover Type	Temporary Impact (Acres)		Permanent Loss (Acres)		Total Impact (Acres)	
	Certified Project	Modified Project	Certified Project	Modified Project	Certified Project	Modified Project
Agricultural Land	299.6	330.46	19.3	19.07	318.8	349.53
Developed Land	0.5	1.05	0	0	0.5	1.05
Total	**477**	**493.71**	**29.8**	**27.37**	**506.8**	**521.08**

[1] As a conservative estimate, the impact calculations in Table 22-3 for the Modified Project include the addition of the six alternate turbines as described herein.

Permanent impacts to successional shrubland have decreased by 0.13 acres, while temporary impacts to successional shrubland have increased by 2.13 acres to accommodate the proposed shifts in Project Components. Both permanent and temporary impacts to successional old-field communities have decreased: by 0.20 acres for permanent impacts and by 2.5 acres for temporary impacts. Both permanent and temporary impacts to forestland communities have also decreased: by 1.87 acres for permanent impacts and by 14.46 acres for temporary impacts.

The limits of tree clearing associated with the Project are shown on the Preliminary Design Drawings in Appendix A. Specific tree clearing types and disposal methods will be outlined on an updated Plan Set to be provided as part of the Tree Clearing Plan for the Project.

Birds and Bats

The estimate of a potential “take” of a listed species for the Project was based on an evaluation of the Project as a 101.8 MW generating facility. As there is no change in the generating capacity of the Project, the applicable Certificate Conditions and monitoring procedures outlined in the Certificate and Certificate Conditions will remain applicable following the proposed modifications described herein.

Wetlands and Waterbodies

As a result of the minor turbine shifts within previously Certified locations, and the reduction in turbine locations from 31 to 25 (without alternates), there will be a reduction in wetland and waterbody impacts. Permanent wetland impacts have been reduced from 0.047 acres to 0.0104 acres. The temporary impacts have also been reduced from 4.3 acres to 2.80 acres. Permanent stream impacts have been reduced from 169 linear feet to 80 linear feet. Temporary stream impacts have also been reduced from 3,701 linear feet to 2,130 linear feet. The permanent impact reduction results from the decrease in required access road and collection line construction. Temporary impact reductions result primarily from temporary workspace, wind turbine construction, and installation of buried or overhead electrical collection lines. Tables 22-11a and 22-11b, below, outline the expected temporary and permanent impacts to wetlands and waterbodies. These tables represent updates to the original Table 22-11 in the Application.

Updated Table 22-11a. Wetland Impacts[1]

	Wetland Impact (Acres)					
	Permanent Impacts		Temporary Impacts		Total Impacts	
	Certified Project	Modified Project	Certified Project	Modified Project	Certified Project	Modified Project
Turbine Sites	0.0	0.0	0.29	0.0419	0.29	0.0419
Access Roads	0.047	0.0104	0.094	0.0	0.141	0.0104
Buried Collection and Temporary Workspace[2]	0.0	0.0	3.916	2.7579	3.89	2.7579
Total	**0.047**	**0.0104**	**4.3**	**2.7998**	**4.347**	**2.8102**

[1] As a conservative estimate, the impact calculations in Table 22-11 for the Modified Project include the addition of the six alternate turbines as described herein.

[2] The Certified Project included 0.025 acres of collocated access road and collection line.

Updated Table 22-11b. Stream Impacts[1]

	Stream Impact (Linear Feet)					
	Permanent Impacts		Temporary Impacts		Total Impacts	
	Certified Project	Modified Project	Certified Project	Modified Project	Certified Project	Modified Project
Turbine Sites	100	0.0	1,962	0.0	2,062	0.0
Access Roads	69	80	176	0.0	245	80
Buried Collection and Temporary Workspace[2]	0.0	0.0	1,563	2,130	1,563	2,130
Total	**169**	**80**	**3,701**	**2,130**	**3,870**	**2,210**

[1] As a conservative estimate, the impact calculations in Table 22-11 for the Modified Project include the addition of the six alternate turbines as described herein.

[2] The Certified Project included 76 linear feet of collocated access road and collection line.

Permanent wetland and stream impacts have decreased with the Modified Project compared to the Certified Project. Permanent wetland impacts have decreased by 0.037 acres (78%) and permanent stream impacts have decreased by 89 linear feet (52%).

Temporary wetland and stream impacts have also been decreased with the Modified Project compared to the Certified Project. Temporary impacts are a result of turbine sites, buried collection line, and temporary workspace. The temporary collection line impacts result from the excavation and back filling operations required for open trench installation within the collection line easement. Temporary workspace is classified as the area within the LOD that is not attributed to a specific Project Component. This includes the workspace on either side of the collection line easement, along the edge of access roads, turbine pads, and grading areas. The total impacts to wetlands have decreased by 1.54 acres (35%) and the total impact to streams has decreased by 1,660 linear feet (43%).

(i) Exhibit 23: Water Resources and Aquatic Ecology (§1001.23)

The groundwater aquifers, depth to groundwater, and well locations within the Project Area have not changed since the Certificate was granted. As a result of the minor turbine shifts in previously certified locations and reduction in the total number of turbines, impacts to surface waters have been updated. As described above in Table 22-11b, the temporary and permanent impacts to streams have decreased. Permanent stream impacts have been reduced from 169 linear feet to 80 linear feet. Temporary stream impacts have also been reduced from 3,701 linear feet to 2,130 linear feet. Several stream crossings are proposed to be installed via Horizontal Directional Drilling (HDD) and therefore result in a total avoided impact of 557.46 linear feet. The amount of HDD required for the Modified Project is comparable to that in the Certified Project (554.33 linear feet). Updated Table 23-2, below, lists a summary of impacts to waterbodies as part of the Modified Project and includes a comparison, by resource, to the impacts associated with the Certified Project. The full list of identified streams is included in Exhibit 23 of the Application.

Updated Table 23-2. Impacts to Waterbodies

ID	Type	Federal Juris.	State Juris.	NYSDEC Classification	Temporary Impact (Linear Feet)	Permanent Impact (Linear Feet)	Project Infra-structure	Crossing Method	Difference from Certified Project (+/- Linear Feet)
AF-S-1*	REPH	Yes	No	-	22.84	-	Collection Line, temp workspace	Open trench	+22.84
AS-S-1	REPH	Yes	No	-	-	-	-	-	-720.89
AS-S-2	REPH	Yes	No	-	55.87	-	Collection Line, temp workspace	Open trench	-0.86
AS-S-3A	RI	Yes	No	-	-	-	-	-	-40.21
CL-S-7	RI	Yes	No	-	-	-	-	-	-64.7
CL-S-13	RI	Yes	No	C	125.28	-	Collection Line, temp workspace	Open trench	+80.04
CL-S-15	RI	Yes	No	-	118.66	-	Temp workspace	-	-8.84
CL-S-16	RI	Yes	No	-	-	-	-	-	-355.57
CL-S-46*	RI	Yes	No	-	77.97	-	Temp workspace	-	+77.97
CL-S-50*	REPH	Yes	No	-	121.47	-	Temp workspace	-	+121.47

Updated Table 23-2. Impacts to Waterbodies

ID	Type	Federal Juris.	State Juris.	NYSDEC Classification	Temporary Impact (Linear Feet)	Permanent Impact (Linear Feet)	Project Infra-structure	Crossing Method	Difference from Certified Project (+/- Linear Feet)
CL-S-7	RI	Yes	No	-	50.12	-	Collection Line, temp workspace	Open trench	-14.58
DL-S-1	RI	Yes	No	-	23.52	1.37	Access Road, collection line	Open trench	-19.92 Temporary impact; +/-0 Permanent Impact
DL-S-2	RI	Yes	No	-	10.13	3.73	Access Road, collection line	Open trench	-22.58 Temporary Impact; +/-0 Permanent Impact
DL-S-8	RUP	Yes	No	-	-	-	-	-	-47.14
DL-S-10	RUP	Yes	Yes	C(T)	-	-	-	-	-525.01
DL-S-11	RI	Yes	No	-	-	-	-	-	-247.86 Temporary Impact -62.85 Permanent Impact

Updated Table 23-2. Impacts to Waterbodies

ID	Type	Federal Juris.	State Juris.	NYSDEC Classification	Temporary Impact (Linear Feet)	Permanent Impact (Linear Feet)	Project Infra-structure	Crossing Method	Difference from Certified Project (+/- Linear Feet)
DL-S-12	REPH	Yes	No	-	-	-	-	-	-341.65 Temporary Impact -37.39 Permanent Impact
DL-S-13	RI	Yes	No	-	-	-	-	-	-454.08
DL-S-14	RUP	Yes	Yes	C(T)	-	-	-	-	-63.02
DL-S-28	RUP	Yes	No	C	50.13	-	Collection Line, temp workspace	Open trench	-2.58
DL-S-32*	RI	Yes	No	-	53.02	-	Collection Line, temp workspace	Open trench	+53.02
DL-S-34*	RI	Yes	No	-	121.82	-	Temp workspace	-	+121.82
FA-S-1	REPH	Yes	No	-	15.15	-	Collection Line, temp workspace	Open trench	-18.02
FA-S-5	REPH	Yes	No	-	-	-	-	-	-57.74
JB-S-1	REPH	Yes	No	-	-	-	-	-	-330.13

Updated Table 23-2. Impacts to Waterbodies

ID	Type	Federal Juris.	State Juris.	NYSDEC Classification	Temporary Impact (Linear Feet)	Permanent Impact (Linear Feet)	Project Infra-structure	Crossing Method	Difference from Certified Project (+/- Linear Feet)
JSB-S-7	REPH	Yes	No	C	237.19	19.82	Access Road, temp workspace	-	+211.67 Temporary Impact -0.02 Permanent Impact
MM-S-7*	REPH	Yes	No	-	272.01	-	Collection Line, temp workspace	Open trench	+272.01
MM-S-8*	REPH	Yes	No	-	30.69	-	Temp workspace	-	+30.69
WB-S-1	RUP	Yes	No	-	-	-	-	-	-62.13
WB-S-2	REPH	Yes	No	-	-	-	-	-	-163.57
WB-S-3	RI	Yes	No	-	-	-	-	-	-22.29
WB-S-4	RI	Yes	No	-	-	-	-	-	-52.69
WB-S-5	RUP	Yes	No	C	-	-	-	-	-14.56
WB-S-9	REPH	Yes	No	-	-	-	-	-	-53.04
WB-S-10	RI	Yes	No	-	74.15	-	Collection Line, temp workspace	Open trench	-83.42

Updated Table 23-2. Impacts to Waterbodies

ID	Type	Federal Juris.	State Juris.	NYSDEC Classification	Temporary Impact (Linear Feet)	Permanent Impact (Linear Feet)	Project Infra-structure	Crossing Method	Difference from Certified Project (+/- Linear Feet)
WB-S-11	RI	Yes	No	C	139.19	16.08	Access Road, temp workspace	Open trench	+103.75 Temporary Impact; 0+/- Permanent Impact
WB-S-13	REPH	Yes	No	-	13.01	-		-	-8.01
WB-S-14	RI	Yes	No	-	93.63	-	Collection Line	Open trench	+34.73
WB-S-15	RUP	Yes	Yes	C(T)	68.11	-	Temp workspace	-	-284.09
WB-S-21*	RI	Yes	No	-	195.49	38.71	Access Road, Collection line, temp workspace	Open trench	+195.49
WB-S-30*	REPH	Yes	No	-	102.60	-	Temp workspace	-	+102.60
WB-S-9	REPH	Yes	No	-	58.32	-	Collection Line, temp workspace	Open trench	+5.28

*Streams identified through requested 500-foot delineations which occurred following submittal of the Application.

In addition to streams, open water wetlands (ponds) were identified during the wetland and stream delineation field work. Updated Table 23-3, below, lists the summary of potential impacts to open water wetlands (ponds) as a result of construction and operation of the Modified Project. Construction and operation is anticipated to result in 0.066 acres of temporary disturbance to open water resources, a reduction of 0.304 acres compared to the Certified Project. A complete list of delineated open water wetlands is included in Exhibit 23 of the Application.

Updated Table 23-3. Impacts to Open Water Wetlands (Ponds)

ID	Type	Acres within Study Area	State Juris.	Federal Juris.	Temporary Impact (acres)	Permanent Impact (acres)	Related Component	Difference from Certified Project (+/- Acre)
DL-W-4	PUB/PEM	0.14/0.07	No	No	0.034	-	Collection line, temp workspace	-0.066
DL-W-6	PUB	0.26	No	No	-	-	-	-0.23
FA-W-3	PEM/PUB	4.53/0.68	No	Yes	-	-	-	-0.04

(j) Exhibit 24: Visual Impacts (§1001.24)

To address any potential incremental visibility resulting from the Modified Project, Eight Point Wind has prepared a Supplemental Visual Analysis. This Supplemental Visual Analysis is included as Appendix D and includes a viewshed analysis and updated photographic simulations. Unless otherwise noted, calculations, maps, and discussion focus on the Modified Project with no alternate turbines included, as the final built Project will not include turbines at both proposed and alternate locations.

The Analysis is summarized within this section and evaluated the potential Project visibility resulting from the change in turbine model with moderately increased height, minor shifts within previously certified locations, but also with a reduction in turbine number, from the original evaluation included in the Visual Impact Assessment (Appendix 24-1 of the Application).

VIEWSHED ANALYSIS RESULTS COMPARISON BETWEEN CERTIFIED AND MODIFIED PROJECTS

The analyses and accompanying results are based on using the viewshed data for blade tip height in the most vertical position with trees included in the landscape for the most realistic depiction of the topographic and vegetated environment. The methodology for this blade tip height analysis is the same as that which was used in Appendix 24-1, Section 7.1.1, of the Application.

Tables 24-1 and 24-2 shows the comparison of visibility by New York counties for 5 and 10 miles. For New York, additional visibility within both 5 and 10 miles of the Modified Project is not significant resulting in an increase of approximately 0.5%.

At noted in Table 24-2, as a result of the Modified Project there is an additional 3.1 square miles of visibility expected within the entire 10-mile visual study area of 552.48 square miles. The updated viewshed maps in Appendix D show these new additional visible areas mostly occur as small increases in the size of areas that previously could already see turbines, rather than entirely new large isolated geographic areas. Furthermore, several of these new areas of visibility are on undeveloped slopes or in open agricultural fields that are inaccessible to the public or are infrequently accessed by the landowner.

The Applicant has also examined the effects of the Modified Project on the near zone. The comparison of the 0.5 Distance Zone has also been assessed as a focus area due to proximal distances from turbines. With respect to the Modified Project, Table 24-3 results show there is less visibility with a decrease of 0.8% visibility within 0.5 miles as compared to the Certified Project. The reduction of turbine number from certain areas likely explains this decrease in visibility.

The accompanying comparison viewshed map supports the results. The map shows virtually no new visible areas within a half mile and as noted, percent visibility decreases. As the maps show, the overall 0.5% visibility increase for the Modified Project appears to occur at locations farther out where many turbine views would be diminished because of distance.

SIMULATION COMPARISON BETWEEN CERTIFIED AND MODIFIED PROJECT

Updated photographic simulations are included in Appendix D and were prepared for Viewpoints #3, #5, #8 #12, #19, and #20. As seen in the simulations, the updates to the Project do not create a significant adverse change in visibility or to the conclusions reached in the Application. Ten turbines have been removed resulting in some areas with fewer turbines in the view. Updated VP5 and VP20 are examples that show less turbines. Simulation VP5 previously showed two turbines in view and there is now only one turbine in view for the Modified Project. Simulation VP20 previously showed ten turbines and there are now eight turbines in the view for the Modified Project. The Modified Project proposes an increase of 70.5 feet for 19 of the proposed turbines and a decrease in height for six turbines. This includes a reduction of 49.2 feet for one turbine location and a reduction of 100 feet for five turbines. Refer to Section 2(b) for a more detailed summary of specific turbine model replacement heights. The updated simulation for VP12 is an example of a turbine that is now proposed to have a lower height for the Modified Project as compared to the Certified Project.

Table 24-1. Percent Visibility of the Five Mile VSA Summarized for Blade Tip Height with Trees Incorporated

Comparison Between Certified Project and Modified Project

County, State	Square Miles of Visibility Certified Project	Percent Visibility Within 5 Miles Certified Project	Square Miles of Visibility Modified Project*	Percent Visibility Within 5 Miles Modified Project*	Difference in Square Miles as a Result of Modified Project*	Percent Difference as a Result of Modified Project*	Percent Difference in Visibility as a Result of Modified Project With Alternates**
Allegany County, NY	12.03	5.80%	12.71	6.14%	+0.68	+0.34%	+0.53%
Steuben County, NY	40.04	19.30%	40.32	19.47%	+0.28	+0.17%	+0.42%
New York Total	**52.07**	**25.10%**	**53.04**	**25.61%**	**+0.96**	**+0.51%**	**+0.95%**

*Calculations are based on Modified Project that do not include alternate turbines

**Percent difference for Modified Project with alternate turbines is provided for comparison. Results show that when considering the Modified Project with alternates included the additional visibility for the Modified Project is still less than one percent, and only varies a few tenths of a percent from the Modified Project with no alternates included.

Table 24-2. Percent Visibility of the Ten Mile VSA Summarized for Blade Tip Height with Trees Incorporated Comparison Between Certified Project and Modified Project

County, State	Square Miles of Visibility Certified Project	Percent Visibility Within 10 Miles Certified Project	Square Miles of Visibility Modified Project*	Percent Visibility Within 10 Miles Modified Project*	Difference in Square Miles as a Result of Modified Project*	Percent Difference as a Result of Modified Project*	Percent Difference in Visibility as a Result of Modified Project With Alternates**
Allegany County, NY	23.11	4.20%	24.75	4.48%	+1.63	+0.28%	0.41%
Steuben County, NY	50.94	9.20%	52.40	9.48%	+1.45	+0.28%	0.39%
New York Total	**74.06**	**13.40%**	**77.14**	**13.96%**	**+3.09**	**+0.56%**	**0.80%**

*Calculations are based on Modified Project that do not include alternate turbines

**Percent difference for Modified Project with alternate turbines is provided for comparison. Results show that when considering the Modified Project with alternates included the additional visibility for the Modified Project is still less than one percent, and only varies a few tenths of a percent from the Modified Project with no alternates included.

Table 24-3. Visibility Within 0.5 Mile Distance Zone for Blade Tip Height with Trees Incorporated Comparison Between Certified Project and Modified Project

Visibility Within 0.5 Distance Zone Square Miles Certified Project	Percent Visibility Within 0.5 Distance Zone Certified Project	Square Miles of Visibility Modified Project*	Percent Visibility with Trees Within 0.5 Distance Zone Modified Project*	Difference in Square Miles as a Result of Modified Project>	Percent Difference as a Result of Modified Project*	Percent Difference in Visibility as a Result of Modified Project With Alternates**
9.80	48.5%	9.64	47.7%	-0.16	-0.8%	-0.2%

*Calculations are based on Modified Project that do not include alternate turbines

**Percent difference for Modified Project with alternate turbines is provided for comparison. Results show that when considering the Modified Project with alternates included the additional visibility for the Modified Project is still less than one percent, and only varies a few tenths of a percent from the Modified Project with no alternates included.

(k) Exhibit 25: Effect on Transportation (§1001.25)

The conceptual site plan for the Modified Project appended hereto in Appendix A depicts the access roads and turbine locations. Some public road intersections may require road improvements to accommodate the turbine component delivery. Logisticus has prepared an updated Turbine Delivery Route Analysis that includes any changes to the haul routes as a result of the taller turbines and reduced number of turbine locations. This Turbine Delivery Route Analysis is included herein as Appendix E.

Road improvements may still be required outside of the Project Area for turbine component delivery, as described in Exhibit 25 of the Application. There are three primary route options for component delivery at this time, each requiring a minimum of six offsite intersection improvements. The majority of offsite intersection improvements include signage/pole removal or tree removal. For the Modified Project, there are 18 proposed onsite road improvement locations, 6 locations in the northern portion of the Project Area and 12 locations in the southern portion of the Project Area. The Modified Project requires two less road improvements compared to the Certified Project. Exhibit 25 of the Application describes three proposed timber deck bridges that are still being evaluated. With continued consultation with the Town and County, the need for these bridges may be avoided.

The blades will still be the longest equipment delivered to the sites at approximately 235 feet in total length. The tower sections will be the tallest equipment delivered to the site ranging from 33.1 feet to 80.1 feet for the six sections for the Siemens 5.0 MW turbine. The nacelle will be the heaviest piece of equipment delivered to the site with an expected weight of 149,914 lbs. (for the Siemens-5.0 MW turbine). The types of trucks and trailers used to transport the blades, tower sections, nacelle, and hub to the Project will be similar to those described in the Application.

To accommodate the taller turbines and updates to turbine foundations, more concrete and aggregate may be needed for each turbine site. The Siemens-5.0 MW turbines require the tower to be transported in six sections and the GE-2.52 MW turbines require the tower to be transported in three sections. The haul road construction aggregate quantity is an average across the Project Site to account for differences in haul road lengths per turbine site. Table 25-2, below, summarizes

the transportation estimates and expected number of loaded trips generated entering each turbine site.

Updated Table 25-2. Expected Number of Loaded Trips for Each Turbine Site

Equipment/Activity	Transport Strategy	Trips per Turbine
Blade Delivery	3 blades with 1 blade per truck	3
Tower Delivery	Siemens 5.0 MW – 6 sections with 1 section/truck	6
	GE 2.52 MW – 3 sections with 1 section/truck	3
Nacelle Delivery	1 nacelle per truck	1
Hub Delivery	1 hub per truck	1
Crane Delivery	1 crane per site with 7 trucks per crane	7
Haul Road Construction	1,300 CY aggregate per site/15 CY truck	87
Foundation Construction	650 CY concrete per site/10 CY truck	65
Various other deliveries	Component delivery	6
Total		2.52 MW = 173 trips/turbine
		5.0 MW = 176 trips/turbine

As part of the Certified Project, with the previously proposed turbine technology, it was assumed that a total of eight to nine component pieces were required per turbine dependent on the model. As can be seen from updated Table 25-2, above, the turbine technology being proposed as part of the Modified Project require additional tower pieces for the Siemens-5.0 turbine (2 additional per turbine) to be transported to the Project Site. Eight Point Wind is anticipating using larger trucks to transport aggregate and concrete needed for haul road and foundation construction resulting in fewer truck loads needed to transport materials to each turbine site. With less turbine sites overall and an increase in truck capacity, there will be a decrease in the expected loaded trips per turbine site and for the Modified Project. The Certified Project included approximately 5,930 loaded trips compared to the Modified Project which proposes approximately 4,382 loaded trips for turbine materials, a 26% reduction.

Conceptual Haul Route and Employee Approach and Departure Routes

As the Certified Project turbine locations (aside from slight locational shifts as outlined in the sections above) remain the same as those proposed in the Modified Project, worker and employee approach and departure routes have not changed. For clarity, Eight Point Wind has included haul route descriptions for each of the turbine locations below with updated turbine numbering and to reflect the reduced number of turbines. These updated haul routes will not create any incremental adverse or significant impact, as they were previously evaluated for the Certified Project.

To Wind Turbine Sites – T1, T2, T3, T5, T6, T7, & T8 – Use Exit 33 from I-86 and proceed south along NY 36 (West Main Street). In the Village of Canisteo make a right turn onto NY 248 (Greenwood Street) and proceed south. Prior to the Town of Greenwood make a right turn onto NY 417 and proceed west:

> **T1, T2, T3, T5, T6, T7, T8**: Continue west along NY 417 to CR 61 (Ridge Road) and make a left turn. Continue south along CR 61. Continuing south along CR 61, T2 will be on the east side of CR 61. Continuing south along CR61, T1 will be on the west side of CR 61. Continuing south along CR 61, T3 will be on the west side of CR 61. Continuing south along CR 61, T5 will be on the west side of CR 61, south of the Dryden Hill Road intersection. Continuing south along CR 61, T6, T7, and T8 will be on the east side of CR 61.

To Wind Turbine Sites – T4, T9, Alt 5, T11, T12, T10 – Use Exit 33 from I-86 and proceed south along NY 36 (West Main Street). In the Village of Canisteo make a right turn onto NY 248 (Greenwood Street) and proceed south. Continue along NY 248 through the Town of Greenwood to King Hill Road and make a right turn.

> **T11**: Continue west along King Hill Road. Past York Road and prior to Cemetery Hill Road, T11 will on the north side of King Hill Road.
>
> **T12**: Continue west along King Hill Road to Cemetery Hill Road and make a left turn. T12 will be on the south side of Cemetery Hill Road.

T10 & T9: Continue west along King Hill Road past Cemetery Hill Road (King Hill Road becomes Town Line Road). Continuing west along Town Line Road, T10 will be on the north side of Town Line Road past Christian Hollow West Union Road. Continuing west along Town Line Road, T9 will be on the south side of Town Line Road past Christian Hollow West Union Road.

T4 & Alt 5: Continue west along Town Line Road to Cemetery Road and make a right turn. Continue north along Cemetery Road to Flynn Road and make a left turn. T4 will be on the north side of Flynn Road. Continuing east on Flynn Road to CR 61 (Ridge Road). Alt 5 will be on the south side of Flynn Road at the intersection with CR 61.

To Wind Turbine Sites – T17, Alt4, T13, Alt 3, Alt 2, Alt 1, T15, T16, T18, T19, T20, T21, Alt 6, T22, T23, T24, T25 & T14 – Use Exit 33 from I-86 and proceed south along NY 36 (West Main Street). In the Village of Canisteo make a right turn onto NY 248 (Greenwood Street) and proceed south. Continue along NY 248 through the Town of Greenwood and the Town of Rexville to CR 98 (Rexville Wileyville Road) and make a left turn.

T13: Continue south along CR 98 (Rexville Wileyville Road) to Irish Hill Road and make a right turn. Continue west along Irish Hill Road, past Shamrock Road, and T13 will be on the north side of Irish Hill Road.

Alt 4: Continue south along CR 98 (Rexville Wileyville Road) to Irish Hill Road and make a right turn. Continue west along Irish Hill Road to Keenan Road and make a right turn. Continue north along Keenan Road to Mahoney Road and make a left turn. Alt 4 will be on the north side of Mahoney Road.

Alt 2 & Alt 3: Continue south along CR 98 (Rexville Wileyville Road) to Irish Hill Road and make a right turn. Continue west along Irish Hill Road to Shamrock Road and stay to the left. Continue southwest along Shamrock Road to Coleman road and make a left turn. Continue south along Coleman Road and Alt 2 will be on the east side of Coleman Road and Alt 3 will be on the west side of Coleman Road.

Alt 1: Continue south along CR 98 (Rexville Wileyville Road), past Saunders Road, and Alt 1 will be on the east side of CR 98.

T15: Continue south along CR 98 (Rexville Wileyville Road) to Irish Hill Road and make a right turn. Continue west along Irish Hill Road to Shamrock Road and stay to the left. Continue south along Shamrock Road to Coleman Road and make a left turn. Continue south along Coleman Road to Frost Road and make a right turn. Continue west along Frost Road and T15 will be on the south side of Frost Road.

T16: Continue south along CR 98 (Rexville Wileyville Road), staying right at Downey Road, and T16 will be on the west side of CR 98.

T18: Continue south along CR 98 (Rexville Wileyville Road) to Saunders Road and make a left. Continue south along Saunders Road and T18 will be on the west side of Saunders Road.

T17, T19 & T20: Continue south along CR 98 (Rexville Wileyville Road) to Downey Road and stay to the left. Continue south along Downey Road and T17 and T19 will be on the east side of Downey Road, north of CR 84 (Squab Hollow Road). Continue south along Downey Road and T20 will be on the west side of Downey Road, south of CR 84 (Squab Hollow Road).

T21, Alt 6 & T24: Continue south along CR 98 (Rexville Wileyville Road) to Downey Road and stay to the left. Continue south along Downey Road to King Hill Road and turn left. Continue east along King Hill Road and T21 and Alt 6 will be on the north side and T24 will be on the south side of King Hill Road, west of Saunders Road.

T22: Continue south along CR 98 (Rexville Wileyville Road) to Downey Road and stay to the left. Continue south along Downey Road to CR 84 (Squab Hollow Road) and turn left. Continue east along CR 84 (Squab Hollow Road), past Kelly Road, and T22 will be on the north side of CR 84.

T23: Continue south along CR 98 (Rexville Wileyville Road) to Downey Road and stay to the left. Continue south along Downey Road to King Hill Road and turn right to continue along Lewis Road. Continue south along Lewis Road and T23 will be on the west side of Lewis Road.

T25: Continue south along CR 98 (Rexville Wileyville Road) to Downey Road and stay to the left. Continue south along Downey Road to CR 84 (Squab Hollow Road) and turn left. Continue east along CR 84 to Kelly Road and turn right. Head south along Kelly Road and T25 will be on the east side of Kelly Road.

T14: Continue south along CR 98 (Rexville Wileyville Road) to Osmin Hill Road and make a left turn. Continue southeast along Osmin Hill Road to McDonald Road and make a right turn. Continue south along McDonald Road and T14 will be on the west side of McDonald Road.

All four turbine locations that are no longer being considered for the Modified Project would have arrived at the Project Site using NY 248 as the primary road. There are two turbine sites north of King Hill Road, directly east and west of currently proposed Turbine 11, one turbine site southwest of currently proposed Turbine 14, and one turbine site north of currently proposed Turbine Alt 4 that are no longer being considered. As a result, there will be a reduction in traffic and employees traveling along NY 248, King Hill Road, McDonald Road, Irish Hill Road, Keenan Road, and Mahoney Road.

The Applicant previously consulted with the Federal Aviation Administration (FAA) and had received Determinations of No Hazard. Due to the minor turbine shifts and increase in turbine height, the Applicant has begun consultation with the FAA and refiled a request for a Determination of No Hazard in December 2020. An informal review with the FAA has also been completed.

(l) Exhibit 26: Effect on Communication (§1001.26)

Eight Point Wind does not anticipate any incremental adverse effect on communication systems due to the Modified Project as concluded in Exhibit 26 of the Application. In the Application Comsearch indicated that a station may experience interference if it was within 1.9 miles of the turbines in the Certified Project, however, the closest AM and FM radio stations are over six miles away from the nearest turbine for the Project. Additional communication systems identified in the Application are not anticipated to be adversely affected by the Modified Project.

Eight Point Wind has consulted with the FAA and the Department of Defense (DOD) to determine the level, if any, of impact the Project has on radar or instrument systems used for air traffic control, guidance, weather, or military operations. The Applicant is conducting additional consultation with the FAA and will comply with the applicable Certificate Conditions related to submissions of Informational Reports and Compliance Filings.

(m) Exhibit 31: Local Laws and Ordinances (§1001.31)

The Towns of Greenwood and West Union have not updated their applicable local laws since the Certificate was issued. Table 6-1, above, includes the specific siting requirements for each town and those required by the Certificate Conditions. The Modified Project includes minor turbine location shifts within previously Certified sites in order to maintain compliance with the specific setback requirements in the Certificate Conditions that are dependent on the turbine height. All other applicable local laws remain the same as described in Exhibit 31 of the Application and no modification of a Certificate Condition related to local laws is required.

(n) Exhibit 34: Electric Interconnection (§1001.34)

The electrical collection system for the Modified Project totals 29.47 miles of underground lines and 0.7 miles of overhead line. There is a reduction of 3.63 miles (10.7%) of collection line compared to the Certified Project. The overhead collection line distance remained the same. The updated Preliminary Design Drawings for the Modified Project included as Appendix A depict the collection line system.

4.0 CONCLUSION

In conclusion, the differences between the Certified Project and the Modified Project are as follows:

- Decrease in the number of turbines required for the Project from 31 to 25 turbines (without alternates);
- Both shorter and taller turbines are now proposed. Additional visibility within both 5 and 10 miles of the Modified Project is not significant, resulting in an increase of approximately 0.5%. On the other hand, there will be less visibility in the foreground, with a decrease of 0.8% visibility within 0.5 miles of the Modified Project as compared to the Certified Project;
- Decrease the total access road acreage required (reduced by 3.2 acres);
- Decrease in the mileage of collection line required (by 3.6 miles);
- The total impacts to wetlands have decreased by 1.54 acres (35%) and the total impact to streams has decreased by 1,660 linear feet (43%);
- Permanent wetland impacts have decreased by 0.037 acres (78%) and temporary wetland impacts have been reduced from 4.3 acres to 2.80 acres;
- Permanent stream impacts have been reduced from 169 linear feet to 80 linear feet (52%) and temporary stream impacts have been reduced from 3,701 linear feet to 2,130 linear feet;
- Permanent impacts to successional shrubland have decreased by 0.13 acres;
- Both permanent and temporary impacts to successional old-field communities have decreased: by 0.20 acres for permanent impacts and by 2.5 acres for temporary impacts;
- Temporary impacts to forestland have decreased by 14.46 acres and permanent impacts have decreased by 1.87 acres.
- The permanent soil impact within Agricultural Districts due to the Modified Project is 0.32 acres less than the Certified Project;
- Decrease in the estimated quantity of gravel that will be imported to the site (decreased by 12.5%) due to the decrease in total number of proposed turbines;
- Decrease in the expected loaded trips per turbine site and for the Modified Project (a 26% reduction);

- Turbines in the Modified Project will be constructed on the majority of the same soils as the Certified Project;
- The only minimal increase in permanent impacts to vegetative communities are to successional shrubland while temporary impacts within developed land have increased negligibly; and
- Temporary impacts to agricultural land may increase by approximately 30 acres; however, the projected increase may not occur at all and any incremental impacts to agricultural land are temporary and will be restored upon the completion of construction.

For all these reasons, the Modified Project will not result in a significant adverse increase to environmental impacts as compared to the Certified Project (16 NYCRR §1000.16(a)) and will not create a new adverse impact compared to the Certified Project. Accordingly, the Modified Project does not rise to the level of a “revision”, and hearings are not required.