Article 1

Section 1 Title
This Local Law may be cited as the "Wind Energy Facilities Law of the Town of Orleans, New York."

Local Law No. 1 of 2011, entitled "Wind Energy Facilities Law of the Town of Orleans, New York," is hereby repealed and replaced in its entirety by this new Local Law, entitled "Wind Energy Facilities Law of the Town of Orleans, New York," which reads in its entirety as follows:

Section 2 Purpose
The Town Board of the Town of Orleans adopts this Local Law to promote the effective and efficient use of the Town's wind energy resource through Wind Energy Conversion Systems (WECS), and to regulate the placement of such systems so that public health, safety, and welfare will not be jeopardized.

Section 3 Authority
The Town Board of the Town of Orleans enacts this Local Law under the authority granted by:

A. Article IX of the New York State Constitution, Section 2(c) (6) and (10).
B. New York Statute of Local Governments, Section 10 (1) and (7).
C. New York Municipal Home Rule Law, Section 10(I)(i) and (ii) and Section 10(l)(a)(6), (11), (12), and (14).
D. New York Town Law Section 130(l) (Building Code), (3)(Electrical Code), (5)(Fire Prevention), (7) Use of Streets and Highways), (7-a)(Location of Driveways), (11)(Peace, good order and safety), (15)(Promotion of public welfare), (15-a)(Excavated Lands), (16)(Unsafe buildings), (19)(Trespass), and (25)(Building lines).
E. New York Town Law Section 64(7-a) (protection of aesthetic interests), 23 (General powers).
F. The State Environmental Quality Review Act ("SEQRA).
G. New York Agricultural and Markets Law.
H. New York Real Property Tax Law.
I. New York Executive Law.

Section 4 Findings
1. The Orleans Town Board, the Zoning Board of Appeals, and the Planning Board have the Responsibility to Protect the Health, Safety and Welfare of ALL Orleans Residents.

This includes Both:

PARTICIPANTS: Any and all Orleans Landowners having a signed lease, or easement with a wind developer.
NON-PARTICIPANTS: Any and all Orleans Landowners having no contractual relationship with a wind developer.

Short-sighted planning can result in creation of problem industries which adversely affect public health, safety and quality of life, can diminish aesthetics and compromise community character. Wind Energy Conversion Systems are not exempt from these problems and careful siting and protections are of paramount importance. This Local Law will contribute to this effort. The existence of Article 10 of the Public Service Law does not negate this responsibility, and in fact recognizes it. This Law is not unduly burdensome to a wind developer due to the local interests, or the process set forth in Article 10, but rather, is compatible with them.

2. The findings set forth in this Section are cumulative and interactive, and shall be liberally interpreted in conjunction, with one another.

3. Wind Energy Conversion Systems have increased significantly in number, and can potentially be sited without sufficient regard to their impact on the health, welfare and safety of residents, especially in small rural communities.

4. Wind Energy Conversion Systems should directly benefit the residents of the local areas where they are sited.

5. Wind Energy Conversion Systems are, by their very nature, not aesthetically pleasing, due to their height, disruption of views and skylines, especially in rural level landed communities without many high structures.

6. The Town of Orleans is a rural community devoid of large hills and consists of mostly flat terrain.

7. The Town of Orleans is an agricultural community supporting varied agricultural uses and is in the heart of the St Lawrence River region and near Fort Drum.

8. The Town of Orleans provides residences for many Soldiers stationed at Fort Drum and their Families.

9. The Town of Orleans actively supports Fort Drum as the Preferred Site for an East Coast Missile Defense Agency Ground Based Interception Site and intends to avoid any interference with Fort Drum and/or that potential expansion.

10. Fort Dum aircraft perform substantial and frequent aviation maneuvers in the area. Wind Energy Conversion Systems at the Western edge of the Wheeler Sack Airfield may have negative operational impacts on the operational effectiveness and efficiency of aviation maneuvers. This might negatively impact National Defense and/or the possibility of Fort Drum closure during any future Department of Defense Base Realignment and Closure proceedings. The Town intends to continue to support, and protect, Fort Drum.

11. The Town of Orleans has very few tall structures.

12. The Town of Orleans is bounded on the east, south and west by Towns which share Orleans' agricultural and rural residential character, and are similarly low, flat areas.

13. The Town of Orleans is bordered on the north by the Nationally Acclaimed Scenic St Lawrence Seaway that contains more than 1000 unique Islands.

14. Wind Energy Conversion Systems represent potential for extreme adverse aesthetic impacts due to their height as well as other effects.

15. The Town of Orleans is located on a major migration route for many species of birds, and is habitat for many species, both year round and seasonal.

16. The bat population in the Town of Orleans is important and has been reported to be in distress.

17. Wind Energy Conversion Systems are known to pose danger to birds and bats, and have been demonstrated to kill numerous members of both.

18. Wind Energy Conversion Systems can cause danger to humans and animals, including livestock resulting from ice throw, collapse, water contamination, and annoyance.

19. Geology/Water Contamination
Local geology in the Town, especially its Karst geology, appears incompatible with industrial development, specifically in regard to industrial wind construction requirements and conditions.
Risks include:

- Aquifer and well water contamination via soil overburden infilling on shallow bedrock in a Karst geology-rich environment.
- Sinkhole collapse near turbine bases via increased bedrock erosion and dissolution.
- Moderate regional seismic risk, according to the United States Geological Survey.

In formulation of this Local Law, many studies have been reviewed and taken into consideration. Wind energy laws in other locations have been reviewed and considered; experiences of other areas have been studied.

20. If not properly regulated, installation of Wind Energy Conversion Systems in areas with Karst Geology have the potential to create numerous additional drainage paths which could allow contaminated ground water to enter directly into the aquifer below. Orleans has many locations in which groundwater flows first above ground then disappears into a sink hole that later reappears and often repeats. Thus, there are often multiple paths that construction wastes can be dissolved into ground water and can contaminate the ground water. For instance, construction of miles of wide gravel access roads will increase the number of drainage paths for the contaminated water to enter the drinking water of residents. Most residents depend upon private wells.

21. Wind Energy Conversion Systems, when improperly sited, are known to adversely affect property values, and cause economic hardship to property owners.

22. The Town of Orleans contains numerous rural newly constructed homes and stretches of homes, in and around LaFargeville along Route 180 as well as dispersed residences. Many person have chosen to live in Orleans because of a love for rural pastoral lifestyle.

23. Town of Orleans residents and visitors enjoy outdoor activities, including marine (boating, fishing, sailing, swimming, kayaking, etc.) and land (hunting, hiking, cycling, snowmobiling, jogging, etc.).

24. Wind Energy Conversion Systems may be significant sources of noise, including infrasound that, if unregulated, can negatively affect quiet enjoyment of the area, properties, and health and quality of life of residents.

25. Construction of Wind Energy Conversion Systems can create traffic problems and can cause damage to local roads and infrastructure.

26. Wind Energy Conversion Systems have the potential to cause electromagnetic interference with various types of communications, cell phones, radio, TV, etc.

27. Wind Energy Conversion Systems have the potential to adversely interfere with orderly development within the Town of Orleans, including single family residences and small subdivisions by making such development unappealing or impossible.

28. Wind Energy Conversion Systems need to be regulated for removal when no longer utilized.

29. The Town of Orleans has regulated Wind Energy Conversion Systems for the past decade through local laws. This Local Law represents an updating of said local law.

30. The town hereby reserves the right to opt out of the Tax Exemption provisions of Rea! Property Tax Law 487, pursuant to the authority granted by paragraph 8 of that law, or by any other provision of law.

31. Wind Energy Conversion Systems shall also comply with the Wind Energy Facility Overlay District.

In 2008, Orleans appointed a Wind Committee and Published 3 reports that are available at the Town of

Orleans NY WEBSITE. These report results steered many parts of this revision of the 2011 Wind Law.

The Town of Orleans has had its Planning Board and other citizens review the need for this law and to make recommendations; its conclusions and recommendations have been duly considered and given great weight. When considering large scale construction and maintenance, due weight should be given to the following:

a) The relative distress caused to a community and its residents;

b) The actual necessity for such facility given energy production in the area and region, including clean energy production;

c) Past and present stresses and disruption imposed upon an area due to all types of energy production;

d) Alternatives to facilities, including location in other areas, location in areas where demand is needed, alternative methods of producing clean energy; and burden on a community and its residents versus reward to community and its residents, with emphasis upon quality of life.

Section 5 Authorization of the Planning Board to Review Wind Energy Conversion Systems.
The Town of Orleans Planning Board is hereby authorized to review and either approve, approve with conditions, or disapprove applications for Wind Energy Conversion Systems.

Section 6 Permits Required; Transfer, Modifications.

A. No Wind Energy Conversion System ("WECS") shall be constructed, reconstructed, modified, or operated in the Town except in compliance with this Local Law and the Town of Orleans Zoning Ordinance, including the Wind Energy Facility Overlay District.

B. No WECS shall be constructed, reconstructed, modified, or operated in the Town except with a Wind Energy Permit approved pursuant to this Local Law.

C. No Wind Measurement Tower a/k/a Met Tower or LIDAR System shall be constructed, reconstructed, modified, or operated in the Town except pursuant to a Wind Energy Permit issued pursuant to this Local Law.

D. This Local Law shall apply to all areas of the Town with proper review by the Planning Board.

E. Exemptions. No permit or other approval shall be required under this Local Law for mechanical, non electrical WECS utilized solely for agricultural operations, commonly referred to as "windmills".

F. Transfer. No transfer of any Wind Energy Conversion System or Wind Energy Permit, nor sale of the entity owning such WECS including the sale of more than 30% of the stock of such entity (not counting sales of shares on a public exchange), may occur unless the transferee provides to the Town Board of the Town of Orleans written certification that such transferee assumes all obligations of the transferor under any permit issued pursuant to this Local Law and any other applicable law or ordinance of entire Town. Notwithstanding the requiements of this Section, replacement in kind or modification of a WECS may occur without Town Board approval when (1) there will, be no increase in Total Height; (2) no change in the location of the WECS; (3) no additional lighting or change in facility color; and (4) no increase in the noise produced by the WECS

Section 7 Definitions
The following terms shall have the meanings indicated:

ADVERSE NOISE IMPACTS – Disturbances that interfere with: normal speech and communications both indoors and outdoors, talking, telephone conversations, reading, tasks requiring concentration, listening to music or television, and sleep.

AMPLITUDE MODULATION – Wind turbine noise (measured in 125-millisecond intervals at any location 3.5 to 25 meters outside a dwelling) is defined as exhibiting amplitude modulation (also referred to by AM or impulsive) when and if the A-weighted sound pressure level rises or falls by more than 3 dB within any 2-second period more than five times in any 1-minute period with an average sound level of 28 dBA or more, six or more times in any hour.

ANNOYANCE – One of the primary effects of noise on exposed communities is long-term annoyance. Noise annoyance has been defined by the Environmental Protection Agency (EPA) as any negative subjective reaction on the part of an individual or group. The scientific community adopted the use of long-term annoyance as a primary indicator of community response because it attempts to account for all negative aspects of effects from noise, e.g., increased annoyance due to being awakened the previous night by aircraft, and interference with everyday conversation.

ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE

APPLICANT - The person or entity filing an application and seeking license under this local law.

A-WEIGHTED (dBA) – The unit of measure for the human response to noise using an electronic filter as specified by ANSI approximating the frequency response of the human ear from 20 Hz to 20 kHz.

BACKGROUND NOISE – The noise level represented without the wind turbine(s) operating and when man-made and natural intrusive sounds are at a minimum. The intent of this definition is to exclude noise level contributions from intermittent noises such as traffic and emergency vehicles, and from seasonal natural sounds such as tree frogs and crickets that are not present year-round.

BLADE GLINT - The intermittent reflection of the sun off the surface of the blades of a single or multiple wind turbines.

BUILDING – Any structure used or intended for supporting any use or occupancy.

CNR (COMMUNITY NOISE RESPONSE) – United States Environmental Protection Agency methodology to predict the community noise reaction to a new sound source introduced into the environment.

C-WEIGHTED (dBC) – An electronic filter with a band-pass frequency response 20Hz to 20kHz.

DAYTIME – Hours from 7:00 AM to 7:00 PM, unless otherwise noted.

DEBRIS HAZARD – Hazard owing to the possibility that the parts of a Wind Turbine, or material (ice or other debris) accumulated on its rotating elements, could be dislodged and fall or be thrown some distance onto surrounding property.

EXCESSIVE NOISE – Any noise that causes a nuisance or disturbance or degrades health or well-being.
FAA - The Federal Aviation Administration.

FREQUENCY – The number of occurrences of a repeating event per unit time; in cycles per second, expressed in Hz (Hertz).

HEALTH – State of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

HERTZ (Hz) – A unit of frequency equal to one cycle per second.

IMPACT(S) – Any effect on the environment, including sound and visual impacts such as changes in sound pressure, noise, and light in the environment.

IMPULSIVE SOUND – Single or multiple noise events lasting one second or less; measured with the un-weighted peak sound pressure level and "Impulse" (35msec) or "Fast" (125 msec) meter response.

INFRASOUND – Sound energy below 20 Hz.

LDN – The day/night level is the 24 hour average of continuous "A-weighted" sound energy having a 10 decibel penalty added to the nighttime hours of 10 p.m. to 7 a.m.

Leq – The equivalent continuous sound level that has the same acoustic energy for a constant sound level as for a fluctuating or intermittent level in the same period of time.

LOAEL – The "Lowest Observed Adverse Effect Level"; 40 dBA, WHO 2009.

NIGHTTIME – Hours from 7:00 PM to 7:00 AM, unless otherwise noted.

NOEL – The "No Observed Effect Level"; 30 dBA, WHO 2009.

NOISE – Unwanted or any sound that is not part of the natural environment.

NOISE EMITTER – Any man-made piece of LWES equipment that is audible beyond the property line of a Participating Landowner.

NOISE LEVEL – Energy-equivalent sound pressure level (Leq) over a minimum of a ten-minute interval.

NON-PARTICIPANT - Any and all Orleans landowners having no contractual relationship with a wind developer.

Orleans MAPPING REQUIREMENTS (OMR)

Maps must be in color.

All mapping scales are to be: 1 inch represents 1100 ft., unless otherwise noted..

The maps must be in a format that allows Color printing of the selected study areas to fit on a Standard 36"x48" Engineering or Blueprint Size.

Each map must be available in Geographic Information System (GIS) Format as a separate overlay to the study area.

These files must be readable with Shapefiles or Google+ or other software compatible with Windows or Mac.

In addition to the individual map requirement in printed form, the maps should be available in PC digital formats

OCTAVE BAND – A band of sound covering a range of frequencies such that the highest is twice the lowest, as defined in ANSI Standard S1.11.

ONE-THIRD OCTAVE BAND – A band of sound covering a range of frequencies such that the highest frequency is the cube root of two times the lowest, as defined in ANSI Standard S1.11.

PARTICIPANT - Any and all Orleans landowners having a signed lease, or easement with a wind developer.

PROJECT BOUNDARY- A continuous line, which encompasses all Wind Turbines and related equipment to be used in association with a Large Wind Energy System.

PROPERTY LINE - Means the recognized and mapped property parcel boundary line.

PURE TONE – Sinusoidal sound energy for a single frequency or pitch.

QUALIFIED INDEPENDENT ACOUSTICAL CONSULTANT - A person who is qualified by education and experience in acoustics and regularly engaged in community noise testing with demonstrated competence in the specialty of community noise testing who is contracted by the Town for purposes of noise measurement or evaluation of noise analysis or noise complaints. The Qualified Independent Acoustical Consultant can have no financial relationship with the Wind developer or related entity.

RESIDENCE – means any dwelling suitable for habitation existing in the Town of Orleans on the date an application is received. For purpose of this definition, "suitable for habitation" shall mean that its primary purpose is for private occupancy.

SEQRA - the New York State Environmental Quality Review Act, as codified in Article 8 of the New York State Environmental Conservation Law and its implementing regulations in Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, Part 617 et seq. (6 NYCRR Section 617).

SETBACKS - a distance measured from edge of a rural right-of-way, property lines, village limits as established by the boundaries of a light district, wetlands, or closest point of residence foundation to the base of the turbine or measurement tower.

SHADOW FLICKER - the visual effect of viewing the moving shadow of the Wind Energy Conversion System (WBCS) rotor blades when they are in a position between the receptor (person viewing them) and the sun and/or the "strobe" lighting effect of this condition as perceived by the receptor whether directly or indirectly (as in a reflection off a light colored wall).

SOCIAL LICENSE – Refers to a local community's acceptance or approval of a company's project or ongoing presence in an area. It is increasingly recognized as a prerequisite to development

SOUND LEVEL – The weighted sound pressure level obtained by the use of a sound level meter and frequency weighting network, such as A, B, or C as specified in ANSI specifications for sound level meters (ANSI SI.4-1971, or the latest revision).

SOUND POWER LEVEL – Lw. Ten times the logarithm to the base ten of the ratio of the sound power radiated by the source to a reference sound power, expressed in decibels (dB). The reference sound power is 1 picowatt (pW).

SOUND PRESSURE LEVEL – Lp. Twenty times the logarithm to the base ten of the ratio of a given sound pressure to a reference sound pressure of 20 microPascals (uPa), expressed in decibels (dB).

TOTAL HEIGHT – The height of the Tower from the finished ground elevation at the base of the Tower to the furthest vertical/extension of the Turbine Rotor Plane.

TOWER HEIGHT - The height of the tower from the finished ground elevation at the tower base to the center of the hub forming the attachment point for Turbine Blades.

UN-WEIGHTED (dBL) – A sound pressure level obtained without a weighting filter.

USEFUL LIFE- The period during which an individual Wind Turbine(s) will be presumed to be at the end of its economic life.

WELFARE – A state of well-being.

WELL-BEING – A good or satisfactory condition of existence; a state characterized by health, happiness, and prosperity.

WIND ENERGY CONVERSION SYSTEMS - An electricity generating facility, with a generating capacity of over 100 kilowatts and less than 30 megawatts, consisting of one or more Wind Turbines, including any substations, cables/wires and other buildings accessory to such system. Sometimes referred to as a facility.

WIND ENERGY PERMIT – A permit granted pursuant to this Local Law granting the holder the right to construct, maintain and operate a Wind Energy Conversion System.

WIND SHEAR – The difference in atmospheric wind speed and direction occurring over relatively small increases in altitude (wind gradient).

Section 8 Applicability

A. The requirements of this Local Law shall apply to all Wind Energy Conversion Systems proposed, operated, modified, or constructed in the Town of Orleans after the effective date of this Local Law, including any Wind Energy Conversion System, applied for but not yet approved prior to the date of this Local Law.

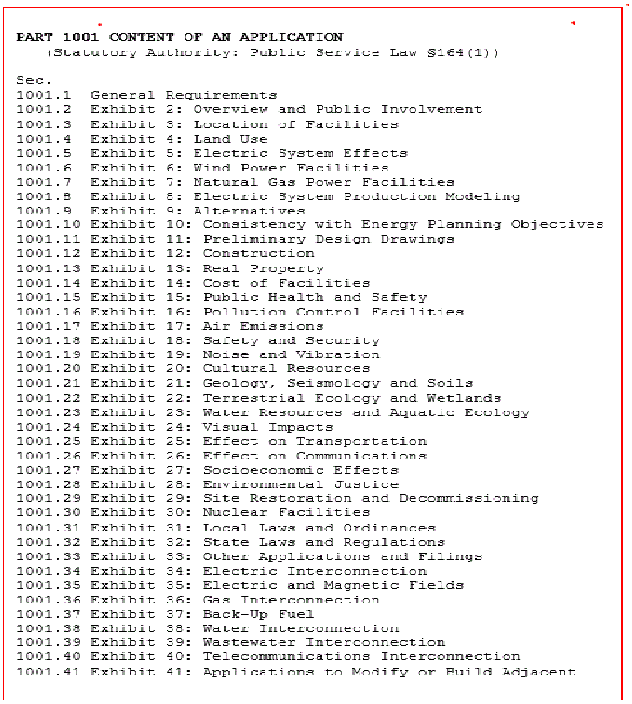
B. Any Wind Measurement Tower or Wind Measurement LIDAR unit existing on the effective date of this Local Law shall be removed no later than thirty-six (36) months after said effective date, unless a Wind Energy Permit is obtained pursuant to the provision of this Local Law.

Section 9 Required Stipulations aka Exhibits

A. All Applications for Wind Energy Conversion Systems are required to provide reports and supporting information based on the studies, evaluations, and analyses set forth in the Stipulations listed below. All studies, evaluations and analysis shall meet the reasonable requirements of the Planning Board before any application shall be deemed complete.

B. These are governed by NYS Article 10 for all Proposed Wind Energy Conversion Systems in Section 160-173 of the Public Service Law and by any application requirements for federally delegated environmental permits issued by the New York State Department of Environmental Conservation (DEC), if applicable.

C. The requirements considered most important to protect the Health, Safety and Welfare of residents of the Town of Orleans are listed in the table on the next page.



PART 1001 CONTENT OF AN APPLICATION
(Statutory Authority: Public Service Law §164(1))

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The following "Exhibits" are required to be provided in any Application for a WECS; (see Section 7, OMR in regard to all maps)

1001.4 Exhibit 4: Land Use

Exhibit 4 shall contain:

(a) A map showing existing land uses within the study area as indicated above.

(b) A map of any existing overhead and underground major facilities for electric, gas or telecommunications transmission within the study area.

(c) A map of all properties upon which any component of theWECS or the related facilities would be located, and all properties within 5,000 feet of such properties, that shows the current land use, tax parcel number and owner of record of each property, and any publically known proposed land use plans for any of these parcels.

(d) A map of existing zoning districts, and proposed zoning districts within the study area, including a description of the permitted and the prohibited uses within each zone.

(e) A map of all publicly known proposed land uses within the study area, from interviews with local planning officials, from the public involvement process, or from other sources.

(f) Maps at a scale as indicated herein showing designated coastal areas, inland waterways; groundwater management zones; designated agricultural districts; flood-prone areas; and critical environmental areas.

(g) Maps showing recreational and other land uses within the study area that might be affected by the sight, sound or odor of the construction or operation of the facility, interconnections and related facilities, including Wild, Scenic and Recreational River Corridors, open space, and any known

archaeological, geologic, historical or scenic area, park, designated wilderness, forest preserve lands, scenic vistas, and conservation easement lands.

(h) A qualitative assessment of the compatibility of the facility and any interconnection, including any off-site staging and storage areas, with existing, proposed and allowed land uses, and local and regional land use plans, within a 5 mile radius of the turbine site and any interconnection route. The qualitative assessment shall include an evaluation of the short-and long-term effects of WECS generated noise, odor, traffic and visual impacts on the use and enjoyment of those areas for the current and planned uses. The assessment shall identify the nearby land uses of particular concern to the community, and shall address the land use impacts of the facility on residential areas, schools, civic facilities, recreational facilities, and commercial areas.

(i) Aerial photographs of all properties within the study area of such scale and detail to enable discrimination and identification or all natural and cultural features.

(j) Overlays on aerial photographs which clearly identify the WECS site and any interconnection route, the limits of proposed clearing or other changes to the topography, vegetation or man-made structures, and the location of access and maintenance routes.

(k) All aerial photographs shall reflect the current situation. All aerial photographs shall indicate the photographer and the date photographs were taken.

1001.13 Exhibit 13: Real Property

Exhibit 13 shall contain:

(a) A survey at a scale of 1 inch represents 1100 ft. of the WECS site showing property boundaries with tax map sheet, block and lot numbers; the owner of record of all parcels Included in the site and for all adjacent properties; easements, grants and related encumbrances on the site parcels; public and private roads on or adjoining or planned for use as access to the site; zoning and related designations applicable to the site and adjoining properties.

(b) A property/right-of-way map at a scale of 1 inch represents 1100 ft. of all proposed interconnection facilities and off-property/right-of-way access drives and construction lay-down or preparation areas for such interconnections.

(c) A demonstration that the applicant has obtained title to or a leasehold interest in the WECS site, including ingress and egress access to a public street, or is under binding contract or option to obtain such title or leasehold interest, or can obtain such title or leasehold interest.

(d) A statement that the applicant has obtained, or can obtain, such deeds, easements, leases, licenses, or other real property rights or privileges as are necessary for all interconnections for the WECS.

1001.15 Exhibit 15: Public Health and Safety

Exhibit 15 shall contain:

A statement and evaluation that identifies, describes, and discusses all potential significant adverse impacts of the construction and operation of the WECS, the interconnections, and related facilities on the environment, public health, and safety, at a level of detail that reflects the severity of the impacts and the reasonable likelihood of their occurrence, identifies the current applicable statutory and regulatory framework, and also addresses:

(a) impacts due to blade throw, tower collapse, audible frequency noise, low-frequency noise, ice throw and shadow flicker;

(b) an analysis showing relation of the proposed facility site to public water supply resources; community emergency response resources and facilities including police, fire and emergency medical

response facilities and plans; emergency communications facilities; hospitals and emergency medical facilities; designated evacuation routes; existing known hazard risks including flood hazard zones, storm surge zones, areas of coastal erosion hazard, landslide hazard areas, areas of geologic, geomorphic or hydrologic hazard; dams, bridges and related infrastructure; explosive or flammable materials transportation or storage facilities; contaminated sites; and other local risk factors;

(c) any adverse impact on the environment, public health, and safety that cannot be avoided should the proposed facility be constructed and operated, and measures for monitoring and measuring such impacts;

(d) any irreversible and irretrievable commitment of resources that would be involved in the construction and operation of the facility.

1001.18 Exhibit 18: Safety and Security

Exhibit 18 shall contain:

(a) A preliminary plan for site security of the proposed WECS during construction of such facility, including site plans and descriptions of the following site security features:

(1) access controls including fences, gates, bollards and other structural limitations;

(2) electronic security and surveillance facilities;

(3) security lighting, including specifications for lighting and controls to address work-site safety requirements and to avoid off-site light trespass; and

(4) setback considerations for turbine components which may present hazards to public safety.

(5) A preliminary plan for site security of the proposed facility during operation of such facility, including site plans and descriptions of the following site security features:

(a) access controls including fences, gates, bollards and other structural limitations;
(b) electronic security and surveillance facilities;
(c) security lighting, including specifications for lighting and controls to address work-site safety requirements and to avoid off-site light trespass;
(d) lighting of facility components to ensure aircraft safety;
(e) setback considerations for facility components which may present hazards to public safety, and
(f) a description of a cyber-security program for the protection of digital computer and communication systems and networks that support the facility demonstrating compliance with current standards issued by a standards setting body generally recognized in the information technology industry, including, but not limited to, the federal Department of Commerce's National Institute of Standards and Technology, the North American Electric Reliability Corporation, or the International Organization for Standardization, and providing for periodic validation of compliance with the applicable standard by an independent auditor.

(b) A preliminary safety response plan to ensure the safety and security of the local community, including:
(1) an identification of contingencies that would constitute a safety or security emergency;
(2) emergency response measures by contingency;
(3) evacuation control measures by contingency; and
(4) community notification procedures by contingency

(c) A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies and hazardous substance incidents.

(d) A description of all contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident.

1001.19 Exhibit 19: Noise and Vibration

Exhibit 19 shall contain:

A study of the noise impacts of the construction and operation of the facility, related facilities and ancillary equipment. The name and qualifications to perform such analyses of the preparer of the study shall be stated. If the results of the study are certified in any manner by a member of a relevant professional society, the details of such certification shall be stated. If any noise assessment methodology standards are applied in the preparation of the study, an identification and description of such standards shall be stated. The study shall include:

(a) A map of the study area showing the location of sensitive sound receptors in relation to the facility, related facilities and ancillary equipment (including any related substations). The sensitive sound receptors shown shall include residences, outdoor public facilities and areas, hospitals, schools and other noise-sensitive receptors.

(b) An evaluation of background pre-construction baseline noise conditions, including A-weighted/dBA sound levels, prominent discrete (pure) tones, at representative potentially impacted noise receptors, using actual measurement data recorded in winter and summer and during day and night as a function of time and frequency using a suitable and suitably calibrated Type 1 sound level meter (SLM) and octave band frequency spectrum analyzer, or similar equipment. The ambient pre-construction baseline sound level should be filtered to exclude seasonal and intermittent noise.

(c) An evaluation of future noise levels during construction of the facility and related facilities including predicted A-weighted/dBA sound levels at potentially impacted and representative noise receptors, using computer noise modeling.

(d) An estimate of the noise level to be produced by operation of the facility, related facilities and ancillary equipment assuming wind-induced background noise or stable atmospheric conditions, as appropriate, and not assuming any attenuation of sound that transiently occurs due to weather or temperature.

(e) An evaluation of future noise levels during operation of the facility, related facilities and ancillary equipment including predicted A- weighted/dBA sound levels, prominent discrete (pure) tones, and amplitude modulated sound, at potentially impacted and representative noise receptors, using computer noise modeling, and an analysis of whether the facility will produce significant levels of low frequency noise or infrasound.

(f) A statement in tabular form of the A-weighted/dBA, C-weighted/dBC sound levels indicated by measurements and computer noise modeling at the representative external property boundary lines of the facility and related facilities and ancillary equipment sites, and at the representative nearest and average noise receptors, for the following scenarios:

(1) Daytime ambient noise level - a single value of sound level equivalent to the level of sound exceeded for 90% of the time during the daytime hours (7 am - 10 pm) of a year (L90).

(2) Summer nighttime ambient noise level - a single value of sound level equivalent to the level of sound exceeded for 90% of the time during the nightime hours (10 pm - 7 am) during the summer (L90).

(3) Winter nightime ambient noise level - a single value of sound level equivalent to the level of sound exceeded for 90% of the time during the nightime hours (10 pm - 7 am) during the winter (L90).

(4) Worst case future noise level during the daytime period - the daytime ambient noise level (L90), plus the noise level from the proposed new sources modeled as a single value of sound level equivalent to the level of sound exceeded for 10% of the time by such sources under normal operating conditions by such sources in a year (Ln).

(5) Worst case future noise level during the summer nightime period the summer nightime ambient noise level (L90), plus the noise level from the proposed new sources modeled as a single value of sound level equivalent to the level of sound exceeded for 10% of the time by such sources under normal operating conditions by such sources in a year (Ln).

(6) Worst case future noise level during the winter nightime period the winter nightime ambient noise level (L90), plus the noise level from the proposed new sources modeled as a single value of sound level equivalent to the level of sound exceeded for 10% of the time by such sources under normal operating conditions by such sources in a year (Ln).

(7) Daytime ambient average noise level - a single value of sound level equivalent to the energy-average ambient sound levels (Leq) during daytime hours (7 am -10 pm); and

(8) Typical facility noise levels - the noise level from the proposed new sources modeled as a single value of sound level equivalent to the level of the sound exceeded 50% of the time by such sources under normal operating conditions by such sources in a year (L50).

(9) Typical future noise level during the daytime period - the energy-average ambient sound level during daytime hours (Leq), plus the noise level from the proposed new sources modeled as a single value of sound level equivalent to the level of the sound exceeded 50% of the time by such sources under normal operating conditions by such sources in a year (L50).

(g) A description of the noise standards applicable to the facility, including any local requirements, and noise design goals for the facility at representative potentially impacted noise receptors, including residences, outdoor public facilities and areas, schools, other noise-sensitive receptors, and at representative external property boundary lines of the facility and related facilities and ancillary equipment sites.

(h) A tabular comparison of the noise standards applicable to the facility, including any local requirements, and noise design goals for the facility, and the degree of compliance indicated by computer noise modeling at the representative external
property boundary lines of the facility and related facilities and ancillary equipment sites and at the representative nearest and average noise receptors.

(i) An identification and evaluation of reasonable noise abatement measures for construction activities, including a description of a complaint-handling procedure that shall be provided during the construction period.

(j) An identification and evaluation of reasonable noise abatement measures for the final design and operation of the facility including the use of alternative technologies, alternative designs, and alternative facility arrangements.

(k) An evaluation of the following potential community noise impacts: hearing damage (as addressed by applicable Occupational Safety and Health Administration standards); indoor and outdoor speech interference; interference in the use of outdoor public facilities and areas; community complaint potential; the potential for structural damage; and the potential for interference with technological, industrial or medical activities that are sensitive to vibration or infrasound.

(l) A description of post-construction noise evaluation studies that shall be performed to establish conformance with operational noise design goals.

(m) An identification of practicable post-construction operational controls and other mitigation measures that will be available to address reasonable complaints, including a description of a complaint-handling procedure that shall be provided during periods of operation.

(n) The computer noise modeling values used for the major noise-producing components of the facility shall fairly match the unique operational noise characteristics of the particular equipment models and configurations proposed for the facility. The software input parameters, assumptions, and associated data used for the computer modeling shall be provided.

1001.21 Exhibit 21: Geology, Seismology and Soils

Exhibit 21 shall contain:

A study of the geology, seismology, and soils impacts of the facility consisting of the identification and mapping of existing conditions, an impact analysis, and proposed impact avoidance and mitigation measures, including:

(a) a map on a scale of 1 inch represents 1100 ft. 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 and interconnections;

(b) a proposed site plan showing existing and proposed contours at two-foot intervals, for the facility site and interconnections, at a scale sufficient to show all proposed buildings, structures, paved and vegetative areas, and construction areas;

(c) a description and preliminary calculation of the quantity of cut and fill necessary to construct the facility, including separate calculations for topsoil, sub-soil and rock, and including a plan to identify the presence of invasive species in spoil material and to prevent the introduction and/or spread of invasive species by the transport of fill material to or from the site of the facility or interconnections;

(d) a description and preliminary calculation of the amount of fill, gravel, asphalt, and surface treatment material to be brought in to the facility site and interconnections;

(e) a description and preliminary calculation of the proposed type and amount of cut material or spoil to be removed from the facility site and interconnections;

(f) a description of excavation techniques to be employed;

(g) a delineation of temporary cut or fill storage areas to be employed;

(h) a description of the characteristics and suitability for construction purposes of the material excavated for the facility and of the deposits found at foundation level, including factors such as soil corrosivity, bedrock competence, and subsurface hydrologic characteristics;

(i) a preliminary plan describing all blasting operations including location, minimum blasting contractor qualifications, hours of blasting operations, estimates of amounts of rock to be blasted, warning measures, measures to ensure safe transportation, storage and handling of explosives, use of blasting mats, conduct of a pro-blasting condition survey of nearby buildings and improvements, and coordination with local safety officials;

(j) an assessment of potential impacts of blasting to environmental features, aboveground structures and below-ground structures such as pipelines and wells;

(k) an identification and evaluation of reasonable mitigation measures regarding blasting impacts, including the use of alternative technologies and/or location of structures, and including a plan for securing compensation for damages that may occur due to blasting;

(l) a description of the regional geology, tectonic setting and seismology of the facility vicinity;

(m) an analysis of the expected impacts of construction and operation of the facility with respect to regional geology, if such can be determined;

(n) an analysis of the impacts of typical seismic activity experienced in the facility area based on current seismic hazards maps, on the location and operation of the facility identifying potential receptors in the event of failure, and if the facility is proposed to be located near a young fault or a fault that has had displacement in Holocene time, demonstration of a suitable setback from such fault;

(o) a map at a scale of 1 inch represents 1100 ft. delineating soil types on the facility and interconnections sites;

(p) a description of the characteristics and suitability for construction purposes of each soil type identified above, including a description of the soil structure, texture, percentage of organic matter, and recharge/infiltration capacity of each soil type and a discussion of any de-watering that may be necessary during construction and whether the facility shall contain any facilities below grade that would require continuous de-watering;

(q) maps at a scale of 1 inch represents 1100 ft. figures, and analyses delineating depth to bedrock and underlying bedrock types, including vertical profiles showing soils, bedrock, water table, seasonal high groundwater, and typical foundation depths on the facility site, and any area to be disturbed for roadways to be constructed and all off-site interconnections required to serve the facility, including an evaluation for potential impacts due to facility construction and operation, including any on-site wastewater disposal system, based on information to be obtained from available published maps and scientific literature, review of technical studies conducted on and in the vicinity of the facility, and on-site field observations, test pits and/or borings as available;

(r) an evaluation to determine suitable building and equipment foundations, including:

(1) a preliminary engineering assessment to determine the types and locations of foundations to be employed. The assessment shall investigate the suitability of such foundation types as spread footings, caissons, or piles, including a statement that all such techniques conform to applicable building codes or industry standards;
(2) if piles are to be used, a description and preliminary calculation of the number and length of piles to be driven, the daily and overall total number of hours of pile driving work to be undertaken to construct the facility, and an assessment of pile driving impacts on surrounding properties and structures due to vibration; and
(3) identification of mitigation measures regarding pile driving impacts, if applicable, including a plan for securing compensation for damages that may occur due to pile driving; and

(s) an evaluation of the vulnerability of the facility site and the operation of the facility to an earthquake event.

1001.22 Exhibit 22: Terrestrial Ecology and Wetlands Exhibit 22 shall contain:

(a) An identification and description of the type of plant communities present on the facility site, the interconnections, and adjacent properties based upon field observations and data collection consistent with the nature of the site and access availability to adjacent properties.

(b) An analysis of the temporary and permanent impact of the construction and operation of the facility and the interconnections on the vegetation identified, including a mapped depiction of the vegetation areas showing the areas to be removed or disturbed, and including a plan to identify the presence of invasive species and to prevent the introduction and/or spread of invasive species.

(c) An identification and evaluation of reasonable avoidance measures or, where impacts are unavoidable, mitigation measures, including the use of alternative technologies, regarding vegetation impacts identified.

(d) A characterization of the facility site and any areas to be disturbed for interconnections as to the vegetation, wildlife (including mammals, birds, amphibians, terrestrial invertebrates, and reptiles) and wildlife habitats, that occur in, on, or in the vicinity, based on reconnaissance or multi-season surveys and data collection appropriate to the nature of the site, supplemented by available data from the New York Natural Heritage Program, New York State (NYS) Amphibian and Reptile Atlas Project, the NYS Breeding Bird Atlas and range maps, Breeding Bird Survey Routes, Christmas Bird Counts and other similar reference sources, including an identification and depiction of any Significant Coastal Fish and Wildlife Habitat Areas designated by DOS/DEC and any unusual habitats or significant natural communities that could support state or federally listed endangered or threatened species or species of special concern.

(e) A list of the species of mammals, birds, amphibians, terrestrial invertebrates, and reptiles reasonably likely to occur on, or in the vicinity of the facility site and areas to be disturbed for interconnections based on site observations and supplemented by publicly available sources.

(f) An analysis of the impact of the construction and operation of the facility and interconnections on vegetation, wildlife, wildlife habitats, and wildlife travel corridors, including a detailed assessment of direct and indirect impacts and identification and evaluation of the expected environmental impacts of the facility on declining species, Species of Greatest Conservation Need (SGCN), and species protected by State and Federal law and the habitats of such species. Given the provisions of §3-0301(2)(r) of the Environmental Conservation Law and §15 of the Public Service Law, information that identifies the locations of habitats of such species or any other species or unique combination of species of flora or fauna where the destruction of such habitat or the removal of such species there from would impair their ability to survive, shall not be disclosed to the public, and shall only be disclosed to the parties to a proceeding pursuant to an appropriate protective order.

(g) An identification and evaluation of reasonable avoidance measures or, where impacts are unavoidable, mitigation measures, including the use of alternative technologies, regarding impacts to vegetation, wildlife and wildlife habitat.

(h) For proposed wind-powered facilities:

(1) an identification and evaluation of the expected environmental impacts of the facility on avian and bat species and the habitats that support them based on information gathered during pre-construction studies conducted at the proposed site and other nearby sites, analysis of known or predicted species and species migration corridors present on site, and including a description of the extent, methodology and results of all such pre-construction studies;

(2) an identification and description of a period of post-construction operations monitoring for potential direct and indirect impacts to avian and bat species and habitats, including a description of the extent, methodology and timing of such post-construction operations monitoring; and

(3) a plan to avoid or, where unavoidable, minimize and mitigate any such impacts during construction and operation of the facility based on existing information, the results of pre- and post-construction monitoring, and any known post-construction impacts that may occur.

(i) A map at a scale of 1 inch represents 1100 ft. showing delineated boundaries based on on-site identification of all federal, state and locally regulated wetlands present on the facility site and within 500 feet of areas to be disturbed by construction, including the interconnections; and predicted presence and extent of wetlands on the remainder of site properties and adjacent properties within

5000 feet of areas to be disturbed by construction. For adjacent properties without accessibility, initial surveys may be based on remote-sensing data, interpretation of published wetlands and soils mapping and aerial photography.

(j) A description of the characteristics of all federal, state and locally regulated wetlands delineated as above, including the Cowardin classification, and a description of the vegetation, soils, and hydrology data collected for each of wetland sites identified, based on actual on-site wetland observations.

(k) A qualitative and descriptive wetland functional assessment, including seasonal variations, for all wetlands delineated as above for groundwater recharge/discharge, floodflow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal, sediment/shoreline stabilization, wildlife habitat, recreation, uniqueness/heritage, visual quality/aesthetics, and protected species habitat.

(l) An analysis of all off-site wetlands that may be hydrologically or ecologically influenced by development of the facility site and the wetlands identified above, observed in the field where accessible to determine their general characteristics and relationship, if any, to wetlands delineated as above

(m) An identification of all temporary and permanent impacts on the wetlands or their regulated adjacent areas.

(n) An identification and evaluation of reasonable avoidance measures or, where impacts are unavoidable, mitigation measures to be employed regarding the wetlands and adjacent areas impacts, including the use of alternative technologies and control of potential phosphorus and nitrogen sources.

(o) An identification of state and federal endangered or threatened species on the facility site or that could be subject to impacts from facility construction, operation, or maintenance, including incidental takings, and an endangered or threatened species mitigation plan.

(p) An invasive species prevention and management plan indicating the presence of invasive species and measures that will be implemented to minimize the introduction of new invasive species and spread of existing invasive species during soil disturbance, vegetation management, transport of materials, and landscaping/revegetation.

(q) An analysis of the temporary and permanent impacts of the construction and operation of the facility and the interconnections on agricultural resources, including the acres of agricultural land temporarily impacted, the number of acres of agricultural land that will be permanently converted to nonagricultural use, and mitigation measures to minimize the impact to agricultural resources. The facility Where appropriate, mitigation shall include plans for compensatory mitigation. Such plans shall contain sections on grading, planting, and monitoring for success.

(r) An identification of state and federal endangered or threatened species on the facility site or that could be subject to impacts from facility construction, operation, or maintenance, including incidental takings, and an endangered or threatened species mitigation plan.

(s) An invasive species prevention and management plan indicating the presence of invasive species and measures that will be implemented to minimize the introduction of new invasive species and spread of existing invasive species during soil disturbance, vegetation management, transport of materials, and landscaping/re-vegetation.

(t) An analysis of the temporary and permanent impacts of the construction and operation of the facility and the interconnections on agricultural resources, including the acres of agricultural land

temporarily impacted, the number of acres of agricultural land that will be permanently converted to nonagricultural use, and mitigation measures to minimize the impact to agricultural resources.

1001.23 Exhibit 23: Water Resources and Aquatic Ecology

Exhibit 23 shall contain the following with regard to:

(a) Groundwater:

(1) Hydrologic information reporting depths to high groundwater and bedrock, including a site map showing depth to high groundwater and bedrock in increments appropriate for the facility site.

(2) A map at a scale of 1 inch represents 1100 ft. based on publicly available information showing all areas within the study area delineating all groundwater aquifers and groundwater recharge areas, and identifying groundwater flow direction, groundwater quality, and the location, depth, yield and use of all public and private groundwater wells or other points of extraction of groundwater, and including delineation of well head and aquifer protection zones.

(3) An analysis and evaluation of potential impacts (during normal and drought conditions) from the construction and/or operation of the facility on drinking water supplies, groundwater quality and quantity in the facility area, including potential impacts on public and private water supplies, including private wells within a three mile radius of the facility site, and wellhead and aquifer protection zones.

(b) Surface Water:

(1) A map at a scale of 1 inch represents 1100 ft. and identification of all surface waters, including intermittent streams, within the study area.

(2) A description of the New York State listed Water Classification and Standards physical water quality parameters, flow, biological aquatic resource characteristics (including species, habitat, and presence of aquatic invasive species) and other characteristics of such surface waters, including intermittent streams, within the study area.

(3) An identification of any downstream surface water drinking-water supply intakes within one mile, or if none within one mile, an identification of the nearest one (giving location of the intakes by longi[t]ude and latitude) that could potentially be affected by the facility or interconnections, including characterization of the type, nature, and extent of service provided from the identified source.

(4) An analysis of the impact of the construction and operation of the facility and interconnections on such surface waters, including impacts to drinking water supplies, and an identification and evaluation of reasonable avoidance measures and, where impacts are unavoidable, mitigation measures regarding impacts on such surface waters, including the precautions that will be taken to avoid or minimize dredging.

(5) An identification and evaluation of reasonable avoidance measures, and where impacts are unavoidable, mitigation measures, including the use of water storage, stormwater reuse, and offsetting water conservation, regarding groundwater impacts.

(c) Stormwater:

(1) A Stormwater Pollution Prevention Plan (SWPPP) for the collection and management of stormwater discharges from the project prepared in accordance with the applicable SPDES General Permit for Stormwater Discharges from Construction Activity (SPDES General Permit) and the most current version of the New York State Standards and Specifications for Erosion and Sediment Control. If the project is not eligible for coverage under the SPDES General Permit, a completed application for a State Pollutant Discharge Elimination System (SPDES) Permit for the collection and management of stormwater discharges from the project.

(2) To the extent not covered in paragraph (1) above, a preliminary plan, prepared in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment Control, that identifies the post construction erosion and sediment practices that will be used to manage stormwater runoff from the developed project site. This can include runoff reduction/green infrastructure practices, water quality treatment practices, and practices that control the volume and rate of runoff.

(d) Spill Prevention

(1) A description of the spill prevention and control measures to be in place for fuel oil storage, wastewater storage, and other chemical, petroleum or hazardous substances stored on site, including an evaluation of alternatives and mitigation measures.

(e) Aquatic Species and Invasive Species:

(1) An analysis of the impact of the construction and operation of the facility on biological aquatic resources, including species listed as endangered,
threatened, or species of special concern in 6 NYCRR Part 182, and including the potential for introducing and/or spreading invasive species.

(2) An identification and evaluation of reasonable avoidance measures and, where impacts are unavoidable, mitigation measures regarding impacts on such biological aquatic resources, including species and invasive species impacts (if any) and assure compliance with applicable water quality standards (6 NYCRR Part 703).

1001.24 Exhibit 24: Visual Impacts

Exhibit 24 shall contain:

(a) A visual impact assessment (VIA) to determine the extent and assess the significance of facility visibility. The components of the VIA shall include identification of visually sensitive resources, viewshed mapping, confirmatory visual assessment fieldwork, visual simulations (photographic overlays), cumulative visual impact analysis, and proposed visual impact mitigation. The VIA shall address the following issues:

(1) the character and visual quality of the existing landscape;

(2) visibility of all above-ground interconnections and roadways to be constructed within the facility study area as determined by the viewshed analysis;

(3) appearance of the facility upon completion, including building/structure size, architectural design, facade colors and texture, and site lighting;

(4) lighting (including lumens, location and direction of lights for facility area and/or task use, and safety including worker safety and tall structure marking requirements) and similar features;

(5) representative views (photographic overlays) of the facility, including front, side and rear views, indicating approximate elevations;

(6) nature and degree of visual change resulting from construction of the facility and above-ground interconnections;

(7) nature and degree of visual change resulting from operation of the facility;

(8) analysis and description of related operational effects of the facility such as visible plumes, shading, glare, and shadow flicker;

(9) proposed mitigation and mitigation alternatives based on an assessment of mitigation strategies, including screening (landscaping), architectural design, visual offsets, relocation or rearranging facility components, reduction of facility component profiles, alternative technologies, facility color and design, lighting options for work areas and safety requirements, and lighting options for stack lighting if required by the Federal Aviation Administration; and

(10) a description of all visual resources that would be affected by the facility.

(b) The viewshed analysis component of the VIA shall be conducted as follows:

(1) Viewshed maps depicting areas of project visibility within the facility study area shall be prepared and presented on maps at a scale of 1 inch represents 1100 ft. of the study area. A line of sight profile shall also be done for resources of town concern located within the VIA study area. The viewshed maps shall provide an indication of areas of potential visibility based on topography and vegetation and the highest elevation of facility structures. The potential screening effects of vegetation shall also be shown. The map(s) shall be divided into foreground, midground and background areas based on visibility distinction and distance zone criteria. Visually-sensitive sites, cultural and historical resources, representative viewpoints, photograph locations, and public vantage points within the viewshed study area shall be included on the map(s) or an overlay. An overlay indicating landscape similarity zones shall be included.

(2) The VIA shall include a detailed description of the methodology used to develop the viewshed maps, including software, baseline information, and sources of data.

(3) The viewshed mapping shall be used to determine the sensitive viewing areas and locations of viewer groups in the facility vicinity. These shall include mostly residences, and historic sites (listed or eligible for listing on the State or National Register of Historic Places), and travelers on NYS RTE 180 and NYS RTE 12

(4) The applicant shall confer with the Towns' planning representatives, in its selection of important or representative viewpoints. Viewpoint selection is based upon the following criteria:

(i) representative or typical views from unobstructed or direct line-of-sight views;
(ii) significance of viewpoints, designated scenic resources, areas or features (which features typically include, but are not limited to: landmark landscapes; wild, scenic or recreational rivers, conservation easement, Scenic districts and scenic roads.
(iii) level of viewer exposure, i.e., frequency of viewers or relative numbers, including residential areas, or high volume roadways;
(iv) proposed land uses;
(v) input from local public sources; and
(vi) building/Structure and land use type data collected for each potentially eligible property prepared in a spreadsheet from highest usage type to lowest with a summary of totals of all current use types

(5) Photographic simulations of the facility and interconnections shall be prepared from the representative viewpoints to demonstrate the post-construction appearance of the facility. Where vegetation screening is relied on for project mitigation, leaf-off and leaf-on simulation shall be provided. Representative viewpoints shall be established in consultation with planning board where appropriate.

(6) Additional revised simulations illustrating mitigation shall be prepared for those observation points for which mitigation is proposed in the application.

(7) Each set of existing and simulated views of the facility shall be compared and rated and the results of the visual impact assessment shall be summarized. Documentation of the steps followed in the rating and assessment methodology shall be provided including results of rating impact panels and a description of the qualifications of the individuals serving on the panels. Orleans Town and Planning Boards Members must be invited to participate. Where visual impacts from the proposed facility are identified, potential mitigation measures shall be outlined, and the extent to which they effectively minimize such impact shall be discussed.

As applicable to the proposed facility technology, the analysis shall include analyses of overall appearance and operational characteristics of the facility and related facilities, including visibility, shading, glare, shadow flicker, or related visible effects of facility operation, including an assessment of the predicted extent,

frequency, and duration of any such visible effects created by the facility.

1001.26 Exhibit 26: Effect on Communications

Exhibit 26 shall contain:

(a) An identification of all existing broadcast communication sources within a 5-mile radius of the facility and the electric interconnection between the facility and the point of interconnection, unless otherwise noted, including:
- (1) AM radio;
- (2) FM radio;
- (3) Television;
- (4) telephone;
- (5) microwave transmission (all affected sources, not limited to a five-mile radius);
- (6) emergency services;
- (7) municipal/school district services;
- (8) public utility services;
- (9) Doppler/weather radar (all affected sources, not limited to a five-mile radius);
- (10) air traffic control (all affected sources, not limited to a five-mile radius);
- (11) armed forces (all affected sources, not limited to a five-mile radius);
- (12) GPS;
- (13) LORAN (all affected sources, not limited to a five-mile radius); and
- (14) amateur radio licenses registered to users.

(b) An identification of all existing underground cable and fiber optic major transmission telecommunication lines within a five-mile radius of the facility and the electric interconnection between the facility and the point of interconnection.

(c) A statement describing the anticipated effects of the proposed facility and the electric interconnection between the facility and the point of interconnection on the communications systems required to be identified pursuant to subdivision (a) and (b) of this section, including the potential for:

- (1) structures to interfere with broadcast patterns by re-radiating the broadcasts in other directions;
- (2) structures to block necessary lines-of-sight; physical disturbance by construction activities;
- (3) adverse impacts to co-located lines due to unintended bonding; and
- (4) any other potential for interference.

(d) An evaluation of the design configuration of the proposed facility and electric interconnection between the facility and the point of interconnection demonstrating that there shall be no adverse effects on the communications systems required to be identified pursuant to subdivision (a) and (b) of this section.

(e) A description of post-construction activities that shall be undertaken to identify and mitigate any adverse effects on the communications systems required to be identified pursuant to subdivision (a) and (b) of this section that occur despite the design configuration of the proposed facility and electric interconnection between the facility and the point of interconnection.

(f) An evaluation of the design configuration of the proposed facility and electric interconnection between the facility and the point of interconnection demonstrating that there shall be no adverse effects on or interference with radar or instrument systems used for air traffic control, guidance, weather, or military operations including training.

1001.27 Exhibit 27: Socioeconomic Effect

Exhibit 27 shall contain:

An estimate of the average construction work force, by discipline, for each quarter, during the period of construction; and an estimate of the peak construction employment level.

(a) An estimate of the annual construction payroll, by trade, for each year of construction and an estimate of annual direct non-payroll expenditures likely to be made in the vicinity of the facility (materials, services, rentals, and similar categories) during the period of construction.

(b) An estimate of the annual secondary employment and economic activity likely to be generated in the vicinity of the facility by the construction of the plant. This analysis shall state the basis of any economic multiplier factor or other assumption used.

(c) An estimate of the number of jobs and the on-site payroll, by discipline, during a typical year once the plant is in operation, and an estimate of other expenditures likely to be made in the vicinity of the facility during a typical year of operation.

(d) An estimate of the annual secondary employment and economic activity likely to be generated in the vicinity of the facility by its operation.

(e) An estimate of incremental school district operating and infrastructure costs due to the construction and operation of the facility, this estimate to be made after consultation with the affected school districts.

(f) An estimate of incremental municipal, public authority, or utility operating and infrastructure costs that will be incurred for police, fire, emergency, water, sewer, solid waste disposal, highway maintenance and other municipal, public authority, or utility services during the construction and operation phases of the facility (this estimate to be made after consultation with the affected municipalities, public authorities, and utilities).

(g) An identification of all jurisdictions (including benefit assessment districts and user fee jurisdictions) that levy real property taxes or benefit assessments or user fees upon the facility site, its improvements and appurtenances and any entity from which payments in lieu of taxes will or may be negotiated.

(h) For each jurisdiction, an estimate of the incremental amount of annual taxes (and payments in lieu of taxes, benefit charges and user charges) and a schedule for the conduct of decommissioning and site restoration activities.

(i) For wind-powered generation facilities and other facilities to be located on lands owned by another, a description of all site restoration, decommissioning and guaranty/security agreements between the applicant and landowner, municipality, or other entity, including provisions for turbines, foundations, and electrical collection, transmission, and interconnection facilities.

(j) For each jurisdiction, a comparison of the fiscal costs to the jurisdiction that are expected to result from the construction and operation of the facility to the expected tax revenues (and payments in lieu of taxes, benefit charge revenues and user charge revenues) generated by the facility.

(1) An analysis of whether all contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident can be fulfilled by existing local emergency response capacity, and in that regard identifying any specific equipment or training deficiencies in local emergency response capacity (this analysis to be made after consultation with the affected local emergency response organizations).

(2) A detailed statement indicating how the proposed facility has achieved SOCIAL LICENSE (Refers to a local community's acceptance or approval of a company's project or ongoing presence in an area. It is increasingly recognized by various stakeholders and

communities as a prerequisite to development).

1001.29 Exhibit 29: Site Restoration and Decommissioning

Exhibit 29 shall contain:

(a) A statement of the performance criteria proposed for site restoration in the event the facility cannot be completed and for decommissioning of the facility, including a discussion of why the performance criteria are appropriate. Among other things, the statement shall address:
- (1) safety and the removal of hazardous conditions; environmental impacts;
- (2) aesthetics;
- (3) salvage and recycling;
- (4) potential future uses for the site; and the useful life of the facility
- (5) environmental impacts.

(b) A plan for the decommissioning and restoration of the facility site including how such decommissioning and restoration shall be funded and a schedule for the conduct of decommissioning and site restoration activities funded and a schedule for the conduct of decommissioning and site restoration activities.

(c) For wind-powered generation facilities and other facilities to be located on lands owned by another, a description of all site restoration, decommissioning and guaranty/security agreements between the applicant and landowner, municipality, or other entity, including provisions for turbines, foundations, and electrical collection, transmission, and interconnection facilities.

(d) For wind-powered generation facilities and other facilities to be located on lands owned by another, a description of all site restoration, decommissioning and guaranty/security agreements between the applicant and landowner, municipality, or other entity, including provisions for turbines, foundations, and electrical collection, transmission, and interconnection facilities.

1001.34 Exhibit 34: Electric Interconnection

Exhibit 34 shall contain:

A detailed description of the proposed electric interconnection including:
- (a) the design voltage and voltage of initial operation;
- (b) the type, size, number and materials of conductors;
- (c) the insulator design;
- (d) the length of the transmission line;
- (e) the typical dimensions and construction materials of the towers;
- (f) the design standards for each type of tower and tower foundation;
- (g) for underground construction, the type of cable system to be used and the design standards for that system;
- (h) for underground construction, indicate on a profile of the line the depth of the cable and the location of any oil pumping stations and manholes;
- (i) equipment to be installed in any proposed switching station or substation including an explanation of the necessity for any such switching station or substation;
- (j) any terminal facility; and the need for cathodic protection measures.

1001.35 Exhibit 35: Electric and Magnetic Fields

Exhibit 35 shall contain:

(a) For the entire right-of-way of the proposed power line providing the electrical interconnection between the proposed facility and the existing electric transmission and distribution system, identify

every right-of-way segment having unique electric and magnetic field (EMF) characteristics due to structure types and average heights, rights-of-way widths, and co-location of other transmission facilities in the right-of-way.

(b) For each identified right-of-way segment, provide both "base case" and "proposed" cross-sections to scale showing:
- (1) all overhead electric transmission, sub-transmission and distribution facilities including the proposed facility showing structural details and dimensions and identifying phase spacing, phasing, and any other characteristics affecting EMF emissions;
- (2) all underground electric transmission, sub-transmission and distribution facilities;
- (3) all underground gas transmission facilities;
- (4) all right-of-way boundaries; and
- (5) structural details and dimensions for all structures (dimensions, phase spacing, phasing, and similar categories) and include a Station number identifying the location.

(c) A set of the aerial photos/drawings enhanced by showing the exact location of each:
- (1) identified right-of-way segment;
- (2) cross-section; and
- (3) nearest residence or occupied non-residential building in each identified right-of-way segment with a stated measurement of the distance between the edge of right-of-way and the nearest edge of the residence or building.

(d) An EMF study with calculation tables and field strength graphs for each identified right-of-way segment cross-section, as follows:
- (1) the study must be signed and stamped/sealed by a licensed professional engineer registered and in good standing in the State of New York;
- (2) provide the name of the computer software program used to model the facilities and make the calculations;
- (3) regarding electric fields, model the circuits at rated voltage and provide electric field calculation tables and field strength graphs calculated at one meter above ground level with 5 foot measurement intervals depicting the width of the entire right-of-way and out to 500 feet from the edge of the right-of-way on both sides, including digital copies of all input assumptions and outputs for the calculations;
- (4) regarding magnetic fields, model the circuit phase currents equal to the summer normal, summer short term emergency (STE Sum), winter-normal, and winter short term emergency (STE Win) loading conditions and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with 5 foot measurement intervals depicting the width of the entire right-of-way and out to 500 feet from the edge of the right-of-way on both sides, including digital copies of all input assumptions and outputs for the calculations;
- (5) regarding magnetic fields, also model the circuit phase currents equal to the maximum average annual load estimated to be occurring on the power lines within ten years after the proposed Facility is put in operation and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with 5 foot measurement intervals depicting the width of the entire right-of-way and out to 500 feet from the edge of the right-of-way on both sides, including digital copies of all input assumptions and outputs for the calculations; and
- (6) regarding magnetic fields, also model a "base case" with the circuit phase currents equal to the maximum average annual load currently estimated to be occurring on the existing power lines within the right-of-way (without construction or operation of the proposed Facility) and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with 5 foot measurement intervals depicting the width of the entire right-of-way and out to 500 feet from the edge of the right-of-way on both sides, including digital copies of all input assumptions and outputs for the calculations.

Article II
Wind Energy Conversion Systems

Section 10 Applications for Wind Energy Permits for Wind Energy Conversion Systems.
No application for a Wind Energy Conversion System, or Facility shall be complete until the following materials are received by the Planning Board, in acceptable form, unless specifically waived by the Planning Board. Such information shall be in addition to, and not instead of, any information required by the Town of Orleans, under any related Local Law or Ordinance, including but not limited to the Town of Orleans Zoning Ordinance and the Wind Energy Facility Overlay District:

A. Name, address, telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address, and telephone number of the agent as well as an original signature of the applicant authorizing the representation.

B. Name, address, telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner (i) confirming that the property owner is familiar with the proposed applications and (ii) authorizing the submission of the application.

C. Address, or other property identification, of each proposed tower location, including Tax Map section, block and lot number

D. A description of the project, including the number and maximum rated capacity of each WECS.

E. For each WECS proposed, a plot plan prepared by a licensed surveyor or engineer drawn in sufficient detail to clearly describe the following:
   1. Property lines and physical dimensions of the Site.
   2. Location, approximate dimensions and types of-existing structures and uses on the Site, public roads, adjoining properties, and the St. Lawrence River and setbacks as here are specified.
   3. Location and elevation of each proposed WECS.
   4. Location of all above and below ground utility lines on the Site-and all related transformers, power lines, interconnection point with transmission lines, and other ancillary facilities or structures.
   5. Location and size of structures above thirty-five (35) feet within A Minimum Distance of 5 times the total height from the proposed WECS. For purposes of this requirement, electrical transmission and distribution lines, antennas and slender or open lattice towers are not considered structures.
   6. To demonstrate compliance with the setback requirements of this Article, circles must be drawn around each proposed tower location with a radius of 5 times the total height of turbine.
   7. Location of each residential structure, both on the site and off the site, that is located within A Minimum Distance of 5 times the total height from the nearest individual Wind Energy Conversion System, as well as the specific distance from the nearest individual Wind Energy conversion System to each residential structure.
   8. All proposed facilities, including access roads, electrical lines, substations, storage or maintenance units, and fencing.

F. Vertical drawing of the WECS showing Tower Height, total height, turbine dimensions, tower and turbine colors, ladders, distance between ground and lowest point of any blade, location of climbing pegs, and access doors. One drawing may be submitted for each WECS of the same type and Tower Height.

G. Landscaping Plan depicting existing vegetation and forest cover describing any areas to be cleared of

vegetation and forest cover and areas where vegetation will be added, identified by species and size of the specimen at installation and their locations.

H. Lighting Plan showing any FAA-required lighting as well as all other proposed lighting. The application should include a copy of any determination by the Federal Aviation Administration to establish required markings and/or lights for each structure that is part of the facility, but if such determination is not available at the time of application, no building permit for any lighted facility may be issued until such determination is submitted.

I. List of property owners, with their mailing addresses, within A Minimum Distance of 5 miles from of any of the boundaries of the proposed Site.

J. Decommissioning Plan; The applicant shall submit a decommissioning plan, which shall include the following information at a minimum:

1) the anticipated life of the WECS;
2) the estimated decommissioning costs in current dollars;
3) how said estimate was determined;
4) the method of ensuring that the funds will be available for decommissioning and restoration;
5) the method, such as by annual re-estimate by a licensed engineer, that the decommissioning cost will be kept current; and
6) the manner in which the WECS will be decommissioned and the Site restored, which shall include at a minimum, the removal of all structures and debris to a depth of three (3) feet, restoration of the soil, and restoration of vegetation (consistent and compatible with surrounding, vegetation), less any fencing or residual minor improvements requested by the landowner.

The plan must also comply with 1001.29 Exhibit 29: Sight Restrictions and Decommissioning

K. PUBLIC INQUIRIES AND COMPLAINTS:

The Applicant/Owner/Operator shall maintain a phone number and identify a responsible person for the public to contact with inquiries and complaints throughout the life of the project, including the decommissioning phase. The Complaint Resolution Process submitted with the Site Plan Review application shall be used to resolve complaints. However, this process shall not preclude the local government from acting on a complaint and local provisions for complaint resolution shall prevail and supersede all Applicant/Owner/Operator complaint resolution processes.

- Any individual, group of individuals or reasonably identifiable entity may file a signed and dated written complaint with the Applicant/Owner/Operator of the WECS. If any complaints are received by phone, the Applicant/Owner/Operator shall inform the complainant that complaints must be submitted in writing. Any complaints received directly by the Zoning Officer or the Planning Board shall be referred to the Applicant/Owner/Operator.

- The Applicant/Owner/Operator of the WECS shall report to the Zoning Officer all complaints received concerning any aspect of the WECS construction, operation, or decommissioning.

- Complaints received by the Applicant/Owner/Operator shall be reported to Zoning Officer within five (5) business days, except that complaints regarding unsafe or serious violations of this Article shall be reported to the Planning Board or its designee the following business day.

The Applicant/Owner/Operator shall document each complaint by maintaining a record including at least the following information:

- Name of the Applicant/Owner/Operator
- Name of complainant, address, phone number

- A copy of the written complaint
- Specific property description (if applicable) affected by complaint
- Nature of complaint (including weather conditions if relevant)
- Name of person receiving complaint, date received
- Date reported to the Planning Board or its designee
- Initial response, final resolution, and date of resolution

The Applicant/Owner/Operator shall maintain a chronological log of complaints received, summarizing the above information. A copy of this log, and a summary of the log by type of complaint, shall be sent on or before January 15, March 15, July 15, and October 15 to the Planning Board, covering the previous calendar quarter. An annual summary shall accompany the January 15 submission.

The Planning Board shall forward copies of any health related complaints to the State Board of Health.

All complaints regarding unsafe and serious violations as defined in Section H of this Article shall be investigated on site. The complainant and a Planning Board designee shall be invited to the investigatory meeting(s).

The Planning Board may designate a person to seek a complaint resolution that is acceptable to the complainant, the Planning Board and the Applicant/Owner/Operator. If such a resolution cannot be obtained, the Town Board may take action as authorized by the enforcement section of this Article.
The Town Board may at any time determine that a complaint shall be subject to enforcement and penalties as defined herein

L. All Required Stipulations/Exhibits set forth at Section 9

M. Complaint Resolution:

The application will include a complaint resolution process to address complaints from nearby residents. The process may use an independent mediator or arbitrator and shall include a time limit for acting on a complaint. The applicant shall make every reasonable effort to resolve the complaint.

N. An application shall include at a minimum, the following information relating to the construction/installation of the wind energy conversion facility:
1. A construction schedule describing commencement and completion dates of the project and beginning and ending hours of daily construction; and
2. A description of the routes to be used by construction and delivery vehicles and the gross weights and heights of those vehicles.
3. Completed Part 1 of the Full EAF.

O. Applications for Wind Energy Permits for Wind Measurement Towers subject to this Local Law may be jointly submitted with the WECS application

P. For each proposed WECS, include make, model, picture and manufacturer's specifications, including noise decibels data. Include Manufacturers' Material Safety Data Sheet documentation for the type and quantity of all materials used in the operation of all equipment including, but not limited to, all lubricants and coolants.

Q. If the Planning Board determines that the proposed WECS may have a significant adverse impact on the environment and requires a Draft Environmental Impact Statement ("DEIS"), the Planning Board shall issue a positive declaration of environmental significance.

R. The following information must be submitted by the applicant, either with the application, or in the event of a positive declaration under SEQRA, as part on any DEIS submitted by the applicant with

respect to. the application for a Wind Energy Permit. Studies conducted by a qualified consultant as to each of the following impacts or potential adverse impacts, and the measures to be taken by the applicant to mitigate or eliminate such impacts. The impacts/issues to be addressed by the studies shall include, at a minimum, the following:

(1) Shadow Flicker: The applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may he caused by the WECS and the expected durations of the flicker at these locations. No shadow flicker will be permitted on non-participants property without an easement or on any roads.

(2) Visual Impact: Applications shall include a visual impact study of the proposed WECS as installed, which shall include a computerized photographic simulation, demonstrating any visual impacts from strategic vantage points. Color photographs of the proposed Site from at least two locations accurately depicting the existing conditions shall be included. The visual analysis shall also indicate the color treatment of the system's components and any visual screening incorporated into the project that is intended to lessen the system's visual prominence.

(3) Fire Protection/Emergency Response Plan: A fire protection and emergency response plan, created in consultation with the fire departments) having jurisdiction over the proposed WECS to address coordination with local emergency/fire protection provider's during any construction or operation phase emergency, hazard or other event,

(4) Noise Analysis: A noise analysis by a competent acoustical consultant documenting the noise levels associated with the proposed WECS, The study shall document noise levels at property lines and at the nearest residence not on the Site (if access to the nearest residence is not available, the Town Board may modify this requirement). The noise analysis shall be performed according to the International Standard For Acoustic Noise Measurement Techniques For Wind Generators (1EC 61400-11), or other procedure accepted by the Town Planning Board, and shall include both a dBA analysis and dBL analysis.

(5) Property Value Analysis: Property value analysis shall be prepared by a licensed appraiser who is a member of the Appraisal Institute and making use of a highest and best use analysis in accordance with industry standards, regarding the potential impact of values of properties in the Town of Orleans within one (1) mile radius of each WECS.

(6) Electromagnetic Interference: 'An assessment of potential electromagnetic interference with microwave, radio, television, satellite systems, personal communication systems and other wireless communication, weather and other radar shall be prepared.

(7) Transportation Impacts: An analysis of impacts on local transportation shall be prepared, regarding impacts anticipated during construction, reconstruction, modification, or operation of WECS. Transportation impacts to be considered shall include, at a minimum, potential damage to local road surfaces, road beds and associated structures; potential traffic tie-ups by haulers of WECS materials; impacts on school bus routes; impacts of visitors to the WECS facilities. Local roads shall include all state highways, county highways, town highways, and village streets and highways, which will be or may be used by the applicant.

(8) Ground Water Impacts: An analysis of impacts on local ground water resources shall be prepared, regarding impacts anticipated during construction, reconstruction, modification or operation of a WECS. An assessment of potential immediate and long-term impacts to local flora and fauna, micro and macro habitats, and ground and surface water related, but not limited to, excavation, blasting, clear-cutting and grading during the Site preparation phase. A geotechnical report shall include: soils engineering and engineering geologic characteristics of the Site based on Site sampling and testing, a bedrock profile within one (I) mile of the Site, information on depth of well, average flow rate, and with permission by owner, test of water qualify for all wells within two (2) miles of the Site, grading criteria for ground preparation, cuts and fills, soil compaction, and a slope stability analysis.

(9) Cultural, Historical, and Archeological Resources Plan: An analysis of impacts on cultural, historical and archeological resources shall be prepared, regarding impacts anticipated during construction, reconstruction, modification, or operation of WECS. This assessment shall be conducted in coordination with the New York State Office of Parks, Recreation and

Historic Preservation.

(10) Wildlife Impacts: An analysis of impacts on local wildlife shall be prepared, regarding impacts anticipated during construction, reconstruction, modification, or operation of WECS. Wildlife impacts to be considered shall include, at a minimum, anticipated impacts on flying creatures (birds, bats, insects), as well as wild creatures existing at ground level. An assessment of the impact of the proposed development on the local flora and fauna will include migratory and resident avian species, bat species and the local wildlife population. The scope of such assessment shall be developed in consultation with the New York State Department of Environmental Conservation and the United States Fish and Wildlife Service and must at a minimum consist of pre-construction data of three years, including radar observations and literature survey for threatened and endangered species that provide relevant information on critical flyways, and shall describe the potential impacts of any proposed facilities on bird and bat species, and an avoidance or mitigation plan to address any impacts, as well as plans for three-year post-installation studies. The analysis shall include observations from multiple site-specific areas meeting DEC guidelines.

(11) Operation and Maintenance Plan: An operation and maintenance plan providing for regular periodic Wind Energy Facility schedules, any special maintenance requirements and procedures and notification requirements for restarts during icing events.

(12) Blade Throw Report: A report from an independent New York State professional engineer that calculates the maximum distance that ice from the turbine blades and pieces of turbine blade could be thrown. (The basis of the calculation and all assumptions must be disclosed.) The incidence of reported ice and blade throws and the conditions at the time of the ice and blade throw must be included. ''

(13) Stray Voltage Report: An assessment,-pre-and post-installation, of possible stray voltage problems on the Site and neighboring properties within one (1) mile of the project boundary to show what properties need upgraded wiring and grounding.'

(14) Seismic Activity Report -WECS developer fund an independent Engineering Study and produce a complete report on the likely effect of seismic activity consistent .with historical data on all the Wind Farm Facilities. Due to the fact that Orleans environment lies on the St. Lawrence seismic fault the developer must submit an earthquake preparedness manual to the Town for protecting the residents in the event of an earthquake of sufficient magnitude to affect the operation of any part of the wind farm.

S. The applicant shall, prior to the receipt of a Wind Energy Permit, provide proof that it has executed an Interconnection Agreement with the New York Independent System Operator and the applicable Transmission Owner. 'Applicant should also provide proof of complying with Public Service Commission power purchase requirements.

T. A statement, signed under penalty of perjury that the information contained in the application is true and accurate.

U. The applicant shall provide proof of general liability insurance in the amount of $5,000,000 per occurrence, total policy minimum of $20,000,000 per year. This shall be submitted to the Town Board of the Town of Orleans indicating coverage for potential damages: or injury to landowners. The Town shall be listed as an additional Named Insured and Certificate Holder.

V. Disclosure of Financial Interests. For any financial interest held by a Municipal Officer or his or her relative in any wind development company or its assets within ten years prior to the date of an application for a permit under this local law, the Wind Company shall disclose in a separate section of the application the Municipal Officer or his or her relative, the addresses of .all persons included in .tire disclosure, and the nature and scope of the financial interest of each such person. The disclosure shall include all such, instances of financial interest of which the Wind Company has knowledge, or through the exercise of reasonable diligence should know, and the format of the submission shall be subject to the approval of the town board.

W. An accurate one-year survey of wind speed data obtained from one (1) or more independently installed wind measurement tower from within relevant locations within the overlay district to determine if it meets the minimum wind speed criteria in NYS for efficient wind power production.

X. The Town shall require the applicant to fund an escrow agreement to cover the amount by which the Town's cost to review the applicant's applications exceed the application fees paid by the applicant.

Y. In addition to the materials required in accordance with this section, complete applications should include any additional study or assessment determined to be required by the lead agency during review of the project pursuant To SEQRA. No application shall be determined to be complete until the DEIS is submitted and accepted by the Planning Board as completed.

Z. A Notice of Proposed Construction or Alteration, FAA Form 7460 Airport Airspace Analysis shall be properly completed, and filed, by the Applicant in relation to the Watertown International Airport.

Section 11 Application Review Process

A. Applicants may request a pre-application meeting with the Planning Board or with any consultants retained by the Planning Board for application review. Meetings with the Town Board, Zoning Board of Appeals, Planning Board or any Town representative shall be conducted in accordance with The Open Meetings Law.

B. Six (6) copies of the application and a complete digital version shall be submitted to the Town Zoning Officer; Payment of all application fees shall be made at the time of application submission. If any waivers are requested, waiver application fees, if any, shall be paid at the time of the receipt of the application in addition, the applicant shall provide the Planning Board free of charge, with a reasonable number of additional copies necessary to coordinate review with involved agencies and interested parties, pursuant to SBQRA.

C. Town staff or Town designated consultants, shall, within one hundred twenty (120) days of receipt, or such longer time if agreed to by the applicant, determine if all information required under this Article is included in the application, unless the Planning Board waives any application requirement, no application shall be considered complete and ready for final action until deemed complete and until either a negative declaration is issued under SEQRA, or, a Final Environmental Impact Statement and SEQRA Findings are issued by the lead agency,

D. If the application is deemed incomplete, the Planning Board or its designated reviewer shall provide the applicant with a written statement listing the missing information. No refund of application fee(s) shall be made, but no additional fees shall be required upon submittal of the additional information.

E. Upon submission of a complete application, including the grant of any application waiver by the Planning Board, the Town Zoning Officer shall transmit the application to the Planning Board.

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The Planning Board shall hold at least one (1) public hearing on the application. Notice shall be provided by the first class mail to property owners within five (5) miles of a turbine, and published in the Town's official newspaper, no less than ten (10) nor more than (20) days before any hearing, but where any hearing is adjourned by the Planning Board to hear additional comments, no further publications or mailing shall be required. The applicant shall prepare and mail the Notice of Public Hearing prepared by the Planning Board, and shall submit an affidavit of service. The assessment roll of the Town shall be used to determine mailing addresses.

F. The public hearing may be combined with any other public hearing required, including public hearings held pursuant to SEQRA

G. Referral shall also be made, when applicable, to the Jefferson County Planning Department, pursuant to General Municipal Law Sections 239-1 and 239-m.

H. SEQRA review. Applications for WECS shall be deemed Type 1 projects under SEQRA. The Planning Board shall be responsible for the review of the proposed project under SEQRA, and shall where appropriate, act as lead agency under SEQRA, and shall coordinate its review with all other involved agencies having discretionary approval over any aspect of the proposed project.

I. The Planning Board shall require an escrow agreement for the engineering and legal review of the applications and any environmental impact statements before commencing its review. At the completion of the SEQRA process, if a positive declaration of environmental significance has been issued and an environmental impact statement prepared, the Planning Board shall issue a Statement of Findings, which Statement may also serve as the Planning Board's decision on the applications.

J. Upon receipt of the recommendations of the County Planning Department (where applicable), the holding of a public hearing, and the completion of the SEQRA process, the Planning Board may approve, approve with conditions, or deny the application, in accordance with the standards in this Article.

K. If approved, the Town Planning Board will issue, to the applicant only, a Wind Energy Permit for each WECS for the purpose of construction and continued operation based on satisfaction of all conditions for said Permit. This authorizes the Zoning Enforcement Officer to issue a zoning permit for each WECS, and the other conditions of this Local Law.

L. If any approved WECS is not substantially commenced within one year of issuance of the permit, the permit shall expire.

Section 12 Standards for WECS

The following standards shall apply to all WECS.

A. All power transmission lines from the tower to any building or other structure shall be located underground to the maximum extent practicable.

B. No television, radio or other communication antennas may be affixed or otherwise made part of any WECS, except pursuant to the Town Code. Applications may be jointly submitted for WECS and telecommunications facilities.

C. In order to minimize any visual impacts associated with Wind Energy Conversion System, no advertising signs are allowed on any part of the Wind Energy Conversion System, including fencing and support structures.

D. Lighting of tower. No tower shall be lit except to comply with FAA requirements. Use red lights approved by FAA. Any strobing light will be required to be equipped with an RF choke and an adequate neutral ground pursuant to National Electric code IEEE 519 standards. Minimum downward directed security lighting for ground level facilities shall be allowed as approved on the site plan.

E. All applicants shall use measures to reduce the visual impact of WECS to the extent possible. WECS shall use tubular towers. All structures in a project shall be finished in a single, non-reflective matte finished white or gray in color. WECS within multiple WECS project shall be constructed using wind turbines whose appearance, with respect to one another, is similar within and throughout the project, to provide reasonable uniformity in overall size, geometry, and rotational speeds. No lettering, company insignia, advertising, or graphics shall be on any part of the tower, hub, or blades.

F. The use of guy wires is permitted in connection with small WECS and wind measurement towers only.

G. No WECS shall be installed in any location where its proximity with existing fixed broadcast,

retransmission, or reception antenna for radio, television, or wireless phone or other personal communication systems can be reasonably expected to produce electromagnetic interference with signal transmission or reception. No WECS shall be installed in any location along the major axis of an existing microwave communications link where its operation is likely to produce electromagnetic interference in the link's operation. If it is determined that a WECS is causing electromagnetic interference, the operator shall take the necessary corrective action to eliminate this interference, .including relocation or removal of the facilities, or resolution of the issue with the impacted parties, Failure to remedy electromagnetic interference is grounds for revocation of the Permit for the specific WECS causing the interference.

H. All solid waste and hazardous waste and construction debris shall be removed from the Site and managed in a manner consistent with all appropriate rules and regulations.

I. WECS' shall be designed to minimize the impacts of land clearing and the loss of open space areas. Land protected by conservation easements shall be avoided when feasible. The use of previously developed areas will be given priority wherever possible.

J. WECS' shall be located in a manner that minimizes significant negative impacts on animal species in the vicinity, particularly bird and bat species, including those that may be listed by the U.S. Fish & Wildlife Service as threatened or endangered and those listed as threatened, endangered, and species of concern by the NYS officials.

K. Wind energy conversion sustems shall be located in a manner consistent with all applicable state and Federal wetlands laws and regulations.

L. Storm-water run-off and erosion control shall be managed in a manner consistent with all applicable state and Federal laws and regulations.

M. The maximum Total Height of any WECS shall be four hundred (400) feet.

N. Any substation used in conjunction with a WECS shall be sited in a manner that will have the least intrusive impact upon adjacent residences and shall be sheltered and/or screened with a physical barrier and/or vegetation in a manner to eliminate its views from such residences. The Planning Board shall assess such siting in accordance with the requirements of this Local Law and the Town's Site Plan.

O. Construction of the WECS shall be limited to the hours of 7 AM to 7 PM, Monday through Friday, unless prior written approval of the Planning Board is issued to allow deviation from such hours.

P. In processing any application for a WECS or in reviewing such project under SEQRA, the Planning Board shall consider any applicable policy or guidelines issued by the New York State DEC (i.e., visual impacts, noise impact).

Q. Turbine blades shall pass no closer than thirty (30) feet to the ground during operation of the facility,

R. Orleans shall require any WECS project to meet the latest version of the National Electric Code for the life of the project. If it is determined that a WECS is causing stray voltage issues, the operator shall take the necessary corrective action to eliminate these problems including relocation or removal of the facilities, or resolution of the issue with the impacted parties. Failure to remedy stray voltage issues is grounds for revocation of the Special use Permit for the specific WECS causing the problems. Fines for non-compliance will be set by the Town Board and assessed accordingly.

S. To the greatest extent possible WECS', together with all above ground facilities, underground cables and wires, and all permanent access roads shall be positioned along existing fence lines, hedge rows or tree rows and/or as near the edge of any fields as possible to minimize the disruption to pasture

land or tillable land. Following construction the site shall be graded and seeded and restored to its preconstruction condition or better. During construction the developer shall be required to act consistent with best agricultural practices to ensure construction integrity of the site.

T. WECSs shall be located in a manner that minimizes significant negative impact on the historical and cultural aspects of the community (i.e. high concentration of historic stone houses and buildings). The Town shall require turbines be sited 2250 feet from residential, historic, schools and wildlife refuge areas to be established by Town Board resolution, This shall be done in coordination with the New York State Office of Parks, Recreation and Historic Preservation. In addition, the review of NY's Department of State guidelines for Scenic Areas of Statewide Significance should be respected.

Section 13 Required Safety Measures.

A. Each WECS shall be equipped with both manual and automatic controls to limit the rotational speed of the rotor blade so it does not exceed the design limits of the rotor.

B. Appropriate warning signs shall be posted. At least one (1) sign shall be posted at the base of the tower warning of electrical shock or high voltage. A sign shall be posted on the entry area offence around each tower or group of towers and any building (or on the tower or building if there is no fence), containing emergency contact information. The Planning Board may require additional signs based on safety needs.

C. No climbing pegs or tower ladders shall be located closer than twelve (12) feet to the ground level at the base of the structure for freestanding single pole or guyed towers.

D. The minimum distance between the ground and any part of the rotor or blade system shall be thirty (30) feet.

E. WECS' shall be designed to prevent unauthorized external access to electrical and mechanical components and shall have access doors that are kept securely locked at all times.

F. Existing snowmobile and/or ATV trails shall be posted to warn of potential ice throw dangers from the WECS.

G. The owner and/or operator of a WECS that has received approval under this Law and for which a permit has been issued shall file with the Town Zoning Offer on an annual basis an Operation and Maintenance Compliance report detailing the operation and maintenance activities over the previous year and certifying full compliance with the Operation and Maintenance Plan. The annual report shall include a noise analysis by an independent acoustical consultant' performed according to the International Standard For Acoustic Noise Measurement Techniques For Wind Generators (1EC 61400-11) or such other procedure as accepted by the Town Planning Board during the permit review process which certifies to the Town that the noise level of the WECS is in full compliance with the provisions of this law and the permit as issued.

Section 14 Traffic Routes

Construction of WECS' pose potential risks because of the large size construction vehicles and their impact on traffic safety and their physical impact on local roads. Construction and delivery vehicles for WECS' and for associated facilities shall use traffic routes established as part of the application review process. Factors in establishing such corridors shall include:

(1) minimizing traffic impacts from construction and delivery vehicles, including impacts on local residential areas;
(2) minimizing WECS related traffic during times of school bus activity;
(3) minimizing wear and tear on local roads; and
(4) minimizing impacts on local business operations.

Wind Energy Permit conditions may limit WECS-related traffic to specific routes, and include a plan for disseminating traffic route information to the public.

A. The applicant is responsible for repair of all damages to Town Roads occurring during the construction or maintenance of a WECS to be addressed in a Road Agreement. A public improvement bond shall be posted prior to the issuance of any zoning permit in an amount, determined by the Planning Board, sufficient to compensate the Town for any damage to local roads.

Section 15 Setbacks and Noise Standards for Wind Energy Conversion Systems.
The following standards shall apply to all WECS:

Setback Requirements:
No Wind Energy Conversion Systems shall be allowed within the following setbacks. If more than one setback applies, the most restrictive setback shall prevail.

From structures:
A Minimum Distance of 5 times the Total Height of turbine from any building.

From property lines:
A minimum of 5 times the Total Height of turbine from any property line excluding adjoining lot lines of the project participants.

From public road and highways:
A Minimum Distance of 5 times the Total Height of turbine, from any public road and highway.

From public above-ground transmission lines:
A minimum of 5 times the Total Height of turbine from any above-ground transmission line greater than 12 kilovolts.

From the boundary of any light district in the Town of Orleans:
A Minimum Distance of 5 times the Total Height of turbine from the boundary of any light district in the Town.

From another WECS turbine:
A Minimum Distance of 5 times the Total Height of turbine from any other turbine.

All power transmission lines from the tower to any building or other structure shall be located underground.

All WECS shall abide by any Noise Ordinance adopted by the Town of Orleans and all requirements of 1001.19 Exhibit 19: Noise and Vibration.

NOISE LEVEL LIMITS AND MEASUREMENT
The intent of this section is to preserve the quiet rural environment of Orleans and to provide protection from Excessive Noise levels that cause adverse Impacts to public Health, Welfare, and Well-being. The existing Background Noise Levels in Orleans are less than 30 dBA. Annoyance due to Noise, as measured by community input, is the consequence of activity interference. Noise Level limits are based on the recommended guidelines found in the United States Environmental Protection Agency's document *Information On Levels Of Environmental Noise Requisite To Protect Public Health And Welfare With An Adequate Margin of Safety, 550/9-74-004, March 1974* and include levels requisite to protect against activity interference. These Noise Level Limits are consistent with the World Health Organization (WHO) night noise guidelines for exposure to noise during sleep found in the following documents: *Night Noise Guidelines (NNLG) for Europe, 2007* and *ISBN 978 92 890 4173 7, 2009.*

All WECS shall comply with all noise standards adopted by the Town Board and contained within the Town of

Orleans Zoning Ordinance and all requirements of 1001.19 Exhibit 19: Noise and Vibration.

This local law is enacted to preserve quality of life, peace, and tranquility, and protect the natural environment. This local law establishes the acoustic baseline, background sound levels for project design purposes, and limits the maximum noise level emissions for commercial and industrial developments. Residents shall be protected from exposure to excessive noises emitted from commercial and industrial development by regulating noise levels and sound quality.

This local law adopts International Standards Organizational (ISO 1996-1:2003) as summarized in Table 1. This standard estimates community response by the increase in the dBA noise level. This local law also applies dBA response corrections for objectionable frequency content (sound quality). Table 1-ISO 1996-1:2003

Table 1

dBA Above Noise Level Criterion	Estimated Community Response	
	Category (ISO) 1	Description (EPA) 2
0	None	No Observed Reaction
5	Little	Sporadic Complaints
10	Medium	Widespread Complaints
15	Strong	Threats of Community Action
20	Very Strong	Vigorous Community Action

1 ISO 1996-1:2003, Acoustics – Description, measurement and assessment of environmental noise – Part 1: Basic quantities and assessment procedures

2 United States Environmental Protection Agency's document "Information On Levels Of Environmental Noise Requisite To Protect Public Health And Welfare With An Adequate Margin of Safety", 550/9-74-004, March 1974

3 See Table B NYS DEC Assessing and Mitigating Noise Impacts DEP-00-1

BACKGROUND BASELINE:

The Town of Orleans is situated in a rural area and is therefore a quiet community , which has defined the acoustic baseline as follows.

Table 2 – Town of Orleans Background Sound Levels Criterion

Zoning District	**Day** (from 7:00 AM to 7:00 Pm)	**Night** (from 7:00 PM to 7:00 AM)	
Rural	35 dBA (10-min L90)	25 dBA (10-min L90)	

Note: L90 is sound level exceeded 90% of the time

NOISE LIMITS:

a. No Commercial and/or industrial noise emissions shall exceed the noise limits in this Table anywhere at any time

b. Table 3 – Operational Noise Limits

Zoning District	**Maximum Noise Limit Day** (from 7:00 AM to 7:00 Pm)	**Maximum Noise Limit Night** (from 7:00 PM to 7:00 AM)	
Rural	45 dBA (10-min L10)	35 dBA (10-min L10)	

Note: L10 is sound level exceeded 10% of the time

When objectionable sound quality is present, a penalty of 5 dB shall be deducted from the maximum noise level limits on Table 3 when the noise emissions meet one (-5 dB) or two (-10 dB) of following conditions (a,b & c). These penalties are cumulative up to a maximum of -10dB.

Table 4– Town of Orleans Sound Quality Corrections

Penalty		Description	Method	Correction
a	Tone(s)	1 Steady Tone	ANSI S1.13; 1/3 Octave	-5 dBA
		Fluctuating	ANSI S1.13; Narrow	
		Multiple Tones	ANSI S1.13; Narrow	
b	Low	20 Hz to 10000	dBC minus dBA >15 dB	-5 dBA
c	Infrasound [I]	≤1.0 Hz to 20	dBL minus dBC >15 dB	-5 dBA

[I] e.g. Wind Turbine

- Any model used to estimate Wind Turbine Noise shall use the following parameters:
  - Each Wind Turbine shall be considered as an individual and unique noise emitter;

  - The prediction model shall use a wind shear (wind profile power law exponent, alpha) of no less than 0.50, where wind shear is defined as the difference in atmospheric wind speed and direction occurring over relatively small increases in altitude;
- No attenuation (zero) for ground cover since a Wind Turbine is an elevated noise emitter;
- No attenuation (zero) for foliage since trees have no leaves from November to April;
- Add a plus 5 dB design margin to the predicted Noise Levels to account for variations in atmospheric propagation due to refraction (the bending of sound waves in the atmosphere due to changes in air temperature or wind gradient).

Noise Compliance Report.

Within four (4) months of the first Wind Turbine becoming operational and again within two (2) months after all Wind Turbines have become operational and at any time the Planning Board deems it necessary due to the number of complaints received, the Applicant/Owner/Operator shall submit to the Planning Board a noise compliance report certifying compliance with the noise regulations set forth herein. The report shall be prepared by a professional acoustical engineer, approved by the Planning Board, who is a Full Member of the Institute of Noise Control Engineering (INCE), or who possesses some comparable qualification. The report shall comply with the following:

A. Except as specifically noted otherwise, sound measurements shall be conducted in compliance with the latest version of the American National Standards Institute (ANSI) Standard S12.18-1994 "Outdoor Measurements of Sound Pressure" using a TYPE 1 Sound Level Meter.

B. Sound level meters and calibration equipment shall comply with the latest version of ANSI Standard S1.4 "Specifications for General Purpose Sound Level Meters," and shall have current calibration traceable to the National Institute of Standards and Testing (NIST).

C. Noise measurements shall be taken at locations and times when the Wind Turbine is clearly audible and dominating the acoustical environment. All unattended measurements shall consider the Wind Turbine as dominating the acoustical environment.

D. Noise measurements shall be taken with the turbines on and off to determine any Background Noise to be accounted for. The Applicant/Owner/Operator shall cooperate by shutting turbines off and turning them on during acoustic testing at times required by the acoustic monitoring personnel.

E. The acoustic monitoring personnel shall determine if extraneous sounds such as insects, frogs, or other sounds are contributing to the measured Leq noise level and remove their contributions either by relocating the measurement microphone to a spot not affected by such sounds or conducting testing at dates and times when such sounds are not present. The acoustic monitoring personnel may correct the Leq noise level using full or 1/3 octave band analysis to subtract Turbine Off levels from Turbine On levels, and by removing data in 1/3 octave bands from the Leq computation that are contaminated by extraneous sounds.

F. The wind velocity at the sound measurement microphone shall not exceed 2 m/s (4.5 mph) during measurements of Background Noise, and the maximum wind speed at the microphone for noise measurements during turbine operation should not exceed 4 m/s (9 mph).

G. During Wind Turbine testing the atmospheric profile shall be Pasquill Stability Class E or F preferred, Class D as alternate. Wind Turbine acoustic testing shall be conducted with wind speeds at Hub Height at 8 m/s or greater.

H. The Wind Turbine shall be fully engaged blades-to-generator and running the standard power output program and producing the maximum power output for the incoming wind speed at Hub Height. Feathering or other blade angle manipulations that are not part of the normal Wind Turbine program to obtain maximum power output shall be prohibited during acoustic testing unless the Wind Turbine must be feathered due to a high wind condition for safety purposes, in which case the

testing shall be rescheduled.

I. Wind Turbine power output and wind speed data at Hub Height at 10-minute or shorter intervals shall be provided to the acoustic monitoring personnel by the Applicant/Owner/Operator for the entire sound measurement period.

Section 16 Reserved

Section 17 Issuance of Wind Energy Permits

A. Upon completion of the review process, the Planning Board shall, upon consideration of the standards in this Local Law, the Town's Noise Ordinance, and the record of the SEQRA review, issue a written decision with the reasons for approval, conditions of approval or disapproval fully stated.

B. The decision of the Planning Board shall be filed within five (5) days in the office of the Town Clerk and a copy mailed to the applicant by first class mail.

C. If any approved Wind Energy Conversion System is not substantially commenced within one (1) year of issuance of the Wind Energy Permit, the Wind Energy Permit shall expire.

Section 18 Decommissioning

A. If any WECS remains non-functional or inoperative for a continuous period of 1 year, the applicant agrees that, without any further action by the Town Board, it shall remove said system at its own expense as per paragraph C below. This provision shall not apply if the applicant demonstrates to the reasonable satisfaction of the Town Board that it has been making good faith efforts to restore the WECS to an operable condition. Nothing in this provision shall limit the Town Board's ability to order a remedial action plan.

B. Non-function or lack of operation may be proven by reports to the Public Service Commission, NYSERDA or by lack of income generation. The applicant shall make available to a designee (i.e. town engineer, project manager, etc.) appointed by the Town Board, all reports from the purchaser of energy from individual WECS, if requested to prove the WECS is functioning. This designee may also request periodic documentation reporting the power output generated by the WECS.

C. Decommissioning and Site Restoration Plan and Requirements. An application for a WECS permit shall include a decommissioning and site restoration plan containing the information and meeting the requirements in this section.

1. The plan shall provide for the removal from the Project Parcels, and lawful disposal or disposition of all Wind Turbines and other structures, hazardous materials, electrical facilities, and all foundations to a depth of not less than 48 inches below grade. The plan shall provide for the removal of all access roads that the owner of the Project Parcels wants removed. The plan shall provide for the restoration of the Project Parcels to farmland of similar condition to that which existed before construction of the WECS.
2. The plan shall provide for the decommissioning of the site upon the expiration or revocation of the WECS permit, or upon the abandonment of the WECS. The WECS shall be deemed abandoned if its operation is ceased for 12 consecutive months,
3. The Plan shall include: (a) the estimated decommissioning cost in current dollars; (b) how said estimate was determined; (e) the method of ensuring that funds will be available for decommissioning and restoration; (d) the method that will be used to keep the decommissioning costs current. The Town Board will make arrangements to ensure the fund amount is adjusted annually based on a suitable index such as the "RS Means Heavy Construction Cost Data" index unless the wind developer supplies evidence to the reasonable satisfaction of the Town Bard that market conditions have changed.
4. The plan shall include provisions for financial security to secure completion of decommissioning (removal of non-functional towers and appurtenant facilities) and site restoration. The applicant, or successors, shall continuously maintain a fund payable to the

Town of Orleans, in a form approved by the Town Attorney, and in an amount to be determined by the Town Board for the period of the life of the facility. This fund shall be no less than 125% of the cost of full decommissioning (including salvage value) and restoration in the form of cash on deposit with the Town or cash held in escrow in a New York licensed-financial institution, pursuant to an agreement acceptable to the Town. All decommissioning funding requirements shall be met prior to commencement of construction.

5. The plan shall include written authorization from the WECS Permittee and all owners of all Project Parcels for the Town to access the Project Parcels and implement the decommissioning and site restoration plan, in the event the WECS Permittee fails to implement the plan. The written authorization shall be in a form approved by the Town.
6. Use of Decommissioning Fund
   (a) Any non-functional or inoperative WECS, or any WECS for which the Permit has been revoked, shall be removed from the site and the site restored in accordance with the approved decommissioning and site restoration within 90 days of the date on which the facility becomes non-functional or inoperative, as defined above, or of the revocation of the permit.
   (b) If removal of the WECS is required and the applicant, permittee, or successor; - fails to remove the WECS and restore the site in accordance with the. approved decommissioning and site restoration plan, the permittee, by accepting the permit, authorizes the Town Board to Contract for such removal and restoration and to pay for the removal and restoration from the posted decommissioning and site restoration fund.
   (c) If the fund is not sufficient, the Town shall charge the permit holder for the costs over and above the amount of the fund.
7. All requirements of 1001.29 Exhibit 29: Site Restoration and Decommissioning shall also apply

Section 19 Limitations on Approvals; Easements on Town Property

A. Nothing in this Local Law shall be deemed to give any applicant the right to cut down surrounding trees and vegetation on any property to reduce turbulence and increase wind flow to the Wind Energy Conversion System. Nothing in this Local Law shall be deemed a guarantee against any future construction or Town approvals of future construction that may in any way impact the wind flow to any Wind Energy Conversion System. It shall be the sole responsibility of the Facility operator or owner to acquire any necessary wind flow or turbulence easements, or right to remove vegetation.

B. Pursuant to the powers granted to the Town to manage its own property, the Town may enter into noise, setback, or wind flow easements on such terms as the Town Board deems appropriate, as long as said agreements are not otherwise prohibited by state or local law.

Section 20 Permit Revocation

A. Testing fund. A permit shall contain a requirement that the applicant fund periodic noise t e s t i n g by qualified independent third-party acoustical measurement consultant, which shall include in the annual Operation Maintenance and Compliance report required by this local law. The scope of the noise testing shall be to demonstrate compliance with the terms and conditions of the Permit and this Local Law and shall include an evaluation of any complaints received by the Town. A non-compliant WECS shall be shut down immediately. The applicant shall have 90 days after written notice from the Zoning Officer, to cure any deficiency. An extension of the 90-day period may be considered by the Zoning Officer, but the total period may not exceed 180 days.

B. Operation. A WECS shall be maintained in operational condition at all times, subject to reasonable maintenance and repair outages. Operational condition includes meeting all noise requirements and other permit conditions. Should a WECS become inoperable, or should any part of the WECS be damaged, or should a WECS violate a permit condition, it shall be shut down immediately. The owner or operator shall remedy the situation within ninety (90) days after written notice from the Town Zoning Enforcement Officer. The applicant shall have ninety (90) days after written notice from the

Town Zoning Enforcement Officer, to cure any deficiency. The Planning Board may extend the ninety (90) days cure for good cause shown.

C. Notwithstanding any other abatement provision under this Local Law, if the WECS is not repaired or made operational or brought into permit compliance after said notice, the Town may, after a public meeting at which the operator or owner shall be given opportunity to be heard and present evidence, including a plan to come into compliance, (1) order either remedial action within a particular timeframe, or (2) order revocation of the Wind Energy Permit for the WECS and require the removal of the WECS within 90 days. If the WECS is not removed, the Town Board shall have the right to use the security posted as part of the Decommission Plan to remove the WECS.

Article III
Wind Measurement Towers

Section 21 Wind Site Assessments

As a wind site assessment is typically conducted to determine the wind speeds and the feasibility of using particular Sites, installation of Wind Measurement Towers, also known as anemometer ("Met") towers, shall be permitted in accordance with this Article.

Section 22 Applications for Wind Measurement Towers.

An application for a Wind Measurement Tower shall include:

A. Name, address, telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address, and telephone number of the agent as well as an original signature of the applicant authorizing the representation.

B. Name, address, telephone number of the property owner.

C. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner:
(i) confirming that the property owner is familiar with the proposed application(s) and
(ii) authorizing the submission of the application.

D. Address of each proposed tower location, including Tax Map section, block and lot number.

E. Proposed Development Plan and Map.

F. Decommissioning Plan, including a security bond for removal.

G. If a Wind Measurement Tower is a part of, or is related to, a potential project for a Wind Energy Conversion System, as defined in the Wind Energy Facilities Law of the Town of Orleans, New York (the "Project"), and regardless of whether an application for the Project will be processed before the State of New York, or any of its agencies, or the Town of Orleans, or any of its agencies, the application shall provide all information as required by Article II hereof, in regard to the Project, unless specifically waived by the Planning Board.

Section 23 Standards for Wind Measurement Towers.

A. The distance between a Wind Measurement Tower and the property line shall be at least one and a half times the Total Height of the tower. Sites can include more than one piece of property and the requirement shall apply to the combined properties. Exceptions for neighboring property are also allowed with the consent of those property owners.

B. Wind Energy Permits for Wind Measurement Towers may be issued for a period of up to three (3) years. Permits shall be renewable upon application to the Planning Board in accordance with the procedure of Section 17.

Article IV
Small Wind Energy Conversion Systems

Section 24 Purpose and Intent.
The purpose of this Article is to provide standards for small wind energy conversion systems designed for home, farm, and small commercial use on the same parcel, and that are primarily used to reduce consumption of utility power at that location. Such WECS shall have a generated capacity of up to 100 kilowatts. The intent of this Article is to encourage the development of small wind energy systems and to protect the public health, safety, and community welfare.

Section 25 Applications.
Applications for Small WECS Wind Energy Facility Permits shall include:

A. Name, address, telephone number of the applicant. If the applicant will be represented by an agent, the name, address and telephone number of the agent as well as an original signature of the applicant authorizing the agent to represent the applicant.

B. Name, address, telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner:
(i) confirming that the property owner is familiar with the proposed applications and
(ii) authorizing the submission of the application.

C. Address of each proposed tower location, including Tax Map section, block and lot number.

D. Evidence that the proposed tower height does not exceed the height recommended by the manufacturer or distributor of the system.

E. A line drawing of the electrical components of the system in sufficient detail to allow for a determination that the manner of installation conforms to the Building Code of the State of New York.

F. Sufficient information demonstrating that the system will be used primarily to reduce consumption of electricity at that location.

G. Written evidence that the electric utility service provider that serves the proposed Site has been informed of the applicant's intent to install an interconnected customer-owned electricity generator, unless the applicant does not plan, and so states in the application, to connect the system to the electricity grid.

H. A visual analysis of the Small WECS as installed, which may include a computerized photographic simulation, demonstrating the visual impacts from nearby strategic vantage points. The visual analysis shall also indicate the color treatment of the system's components, and any visual screening incorporated into the project that is intended to lessen the system's visual prominence.

Section 26 Development Standards.
All small wind energy systems shall comply with the following standards. Additionally, such systems shall also comply with all the requirements established by other sections of this Article that are not in conflict with the requirements contained in this section.

A. A system shall be located on a lot a minimum of one (1) acre in size, however, this requirement can be met by multiple owners submitting a joint application.

B. Only one (1) small wind energy system tower per legal lot shall be allowed, unless there are multiple applicants, in which their joint lots shall be treated as one lot for purposes of this Article.

C. Small Wind energy systems shall be used primarily to reduce the on-site consumption of electricity.

D. Tower heights may be allowed as follows:
1. Sixty-five (65) feet or less on parcels between one (1) and five (5) acres,
2. Eighty (80) feet or less on parcels of five (5) or more acres.

E. The maximum turbine power output is limited to 100 KW,

F. The system's tower and blades shall be painted a non-reflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible and incorporate non- reflective surfaces to minimize any visual disruption.

G. The system shall be designed and located in such a manner to minimize adverse visual impacts from public viewing areas.

H. Exterior lighting on any structure associated with the system shall not be allowed except that which is specifically required by the Federal Aviation Administration.

I. All on-site electrical wires associated with the system shall be installed underground except for "tie-ins" to a public utility company and public utility company transmission poles, towers and lines. This standard may be modified by the Planning Board if the project terrain is determined to be unsuitable due to reasons of excessive grading, 'biological impacts, or similar factors."

J. The system shall be operated such that no disruptive electromagnetic interference is caused. If it has been demonstrated that a system is causing harmful interference, the system operator shall promptly mitigate the harmful interference or cease operation of the system.

K. At least one (1) sign shall be posted on the tower at a height of five (5) feet warning of electrical shock or high voltage and harm from revolving machinery. No brand names, logo or advertising shall be placed or painted on the tower rotor, generator or tail vain where it would be visible from the ground, except that a system or motor's manufacturer's logo may be displayed on system generator housing in an unobtrusive manner.

L. Towers shall be constructed to provide one of the following means of access control, or other appropriate method of access:
1. Tower-climbing apparatus located no closer than twelve (12) feet from the ground.
2. A locked anti-climb device installed on the tower.
3. A locked, protective fence at least six (6) feet in height that encloses the tower.

M. Anchor points for any guy wires for a system tower shall be located within the property that the system is located on and not on or across any above-ground electric transmission or distribution lines. The point of attachment for the guy wires shall be enclosed by a fence six (6) feet high or sheathed in bright orange or yellow covering from three (3) to eight (8) feet above the ground.

N. Construction of on-site access roadways shall be minimized. Temporary access roads utilized for initial installation shall be re-graded and re-vegetated to the pre-existing natural condition after completion of installation.

O. To prevent harmful wind turbulence from existing structures, the minimum height of the lowest part of any horizontal axis wind turbine blade shall be at least thirty (30) feet above the highest structure or tree within a two hundred and fifty (250) foot radius. Modification of this standard may be made when the applicant demonstrates that a lower height will not jeopardize the safety of the wind turbine structure,

P. All small wind energy system tower structures shall be designed and constructed to be in compliance with pertinent provisions of the Uniform Fire Prevention and Building Code.

Q. All small wind energy systems shall be equipped with manual and automatic over-speed controls. The conformance of rotor and over-speed control design and fabrication with good engineering practices shall be certified by the manufacture.

R. Setback requirements. A Small WECS shall not be located closer to a property line than one and one half (1½) times the Total Height of the facility

S. Noise. Except during short-term events including utility outages and severe wind storms, a Small WECS shall be designed, installed, and operated so that noise generated by the system shall not exceed ambient noise levels (exclusive of the development proposed) by more than 6 dBA at the nearest property line to any proposed Small WECS. Sites can include more than one piece of property and the requirement shall apply to the combined properties. In the event the ambient sound pressure level exceeds 50 dBA, the standard shall be ambient dBA plus a maximum of 5 dBA. Independent certification shall be provided before and after construction demonstrating compliance with this requirement.

Section 27 Abandonment of Use.
A Small WECS which is not used for twelve (12) successive months shall be deemed abandoned and shall be dismantled and removed from the property at the expense of the property owner. Failure to abide by and faithfully comply with this section or with any and all conditions that may be attached to the granting of any building permit shall constitute grounds for the revocation of the permit by the Planning Board. If not removed within 90-days from revocation, the Town shall have the right to remove the small WECS at the owner's expense.

All Small WECS shall be maintained in good condition and in accordance with all requirements of this section.

Article V
Waivers

Section 28 Waivers.
A. The Planning Board may, after a public hearing (which may be combined with other public hearings on Wind Energy Conversion Systems, so long as the waiver request is detailed in the public notice), grant a waiver from the strict application submittals of the provisions of this Local Law if, in the opinion of the Planning Board, the grant of said waiver is in the best interests of the Town. The Planning Board may consider as reasonable factors in evaluating the request, which may include, when applicable, the impact of the waiver on the neighborhood, including the potential detriment to nearby properties, the benefit to the applicant, feasible alternatives, and the scope of the request.
B. The Planning Board may attach such conditions as it deems appropriate to waiver approvals as it deems necessary to minimize the impact of the waiver.

Article VI
Miscellaneous

Section 29 Reserved

Section 30 Reserved

Section 31 Fees
A. Non-refundable Application Fees shall be as follows:
1. WECS Wind Energy Permit: $100 per megawatt of rated maximum capacity.

2. Wind Measurement Towers Wind Energy Permit: $100 per tower.
3. Small WECS Wind Energy Permit: $100 per WECS
4. Wind Measurement Tower Wind Energy Permit renewals: $100 per Wind Measurement Tower.

The Town Board may establish such fees by a fee schedule adopted by Resolution.

B. Wind Energy Permits. The review of permits for WECS require expertise and will require the Town to engage the services of professional consultants such as attorneys and engineers, the expenses for which cannot be accurately established in advance. Therefore, in addition to the above, the applicant shall be responsible for all of the Town's reasonable expenses incurred in the permit review process including, but not limited to, all administrative costs, attorney's fees and engineering fees, and the applicant shall be required to enter into an escrow agreement with the Town in advance of such review to provide for the payment of such costs and expenses of review as agreed by the parties.

C. Nothing in this Local Law shall be read as limiting the ability of the Town to enter into Host Community agreements with any applicant to compensate the town for expenses or impacts on the community. The Town shall require any applicant to enter into an escrow agreement to pay the engineering and legal costs of any application review, including the review required by SEQRA.

Section 32 Tax Exemption

The Town hereby reserves the right to opt out of the Tax Exemption provisions of Real Property Tax Law Section 487, pursuant to the authority granted by paragraph 8 of that law, or by any other provisions of law.

Section 33 Inspections.

A. WECS shall not begin operation until all approvals required under this law are obtained and all required certifications are provided.

B. Following the issuance of any approval required under this Local Law, the Planning Board or its designee shall have the right to enter onto the Site upon which a WECS has been placed, at reasonable times in order to inspect such facility and its compliance with this Local Law.

C. After undertaking such inspection, the Planning Board or its designated representative shall provide notice of any non-compliance with the terms of this Local Law or the conditions of approval of any permit issued hereunder, and shall provide the owner or applicant with a reasonable time frame to cure such violation, such timeframe to be determined based upon the seriousness of the violation, its impact upon public safety, and the impact of the violation upon residents of the Town.

Section 34 Construction Related Damage.

The owner of every WECS constructed pursuant to this law shall, to the extent practicable, repair or replace all real or personal property, public or private, damaged during the construction of such facility.

Section 35 Enforcement; Penalties and remedies for violations.

A. The Town Zoning Enforcement Officer and such Town staff or outside consultants as appointed by the Town Board shall administer and enforce this Local Law.

B. Any person owning, controlling or managing any building, structure or land who shall undertake a Wind Energy Facility in violation of this Local Law or in noncompliance with the terms and conditions of any permit issued pursuant to this Local Law, or any order of the enforcement officer, and any person who shall assist in so doing, shall be guilty of an offense and subject to a fine of not more than $250.00. Every such person shall be deemed guilty of a separate offense for each week such violation shall continue. The Town may institute a civil proceeding-to collect civil penalties in the amount of $250.00 for each violation and each week said violation continues shall be deemed a

separate violation.

C. In case of any violation or threatened violation of any of the provisions of this Local Law, including the terms and conditions imposed by any permit issued pursuant to this Local Law, in addition to other remedies and penalties herein provided, the Town may institute any appropriate action or proceeding to prevent such unlawful erection, structural alteration, reconstruction, moving and/or use, and to restrain, correct or abate such violation, to prevent the illegal act.

D. Complaint Resolution Fines specific to WECS: (does not apply to small WECS) Fines for violations will be levied and reviewed on an annual basis by the Town Board and will include, but not be limited to, the following categories.

1. Shadow Flicker Complaint: If the developer does not comply within said time limits, the Town Board will impose a fine of $250 per day, starting from first day of complaint.
2. Setback Violation Complaint: If the developer does not comply with setback violation within said time limits, the Town Board will impose a fine of $250. per day, starting from first day of violation and/or revoke the permit to operate.
3. Electromagnetic-Stray Voltage Complaint: If the developer does not comply within said time limits, the Town Board will impose a fine of $ 250 per day, starting from first day of complaint,
4. Protection of Aquifers, Ground Water and Wells: If developer fails to comply, the fine will Be $250. per day, starting from the first day of complaint.

Section 36 Fiscal Responsibility.

A. The Planning Board may, at its discretion, request the most recent annual audited financial report of the permittee prepared by a duly licensed Certified Public Accountant, during the review process. If such report does not exist, the Planning Board may, in its sole discretion, require a suitable alternative to demonstrate the financial responsibility of the applicant and its ability to comply with the requirements of this Local Law.

B. No transfer of any WECS or permit, or sale of the entity owning such facility, including the sale of more than 30% of the stock of such entity (not counting sale of shares on a public exchange) shall occur without written acceptance by such entity of the obligations of the permittee under this Local Law and the terms of the permit. Any such transfer shall not eliminate the liability of any entity for any act occurring during its ownership or status as permittee.

Section 37 Certification.

Prior to operation of any approved and constructed Wind Energy Conversion System, the applicant must provide a certification that the project complies with applicable codes, industry practices and conditions of approval (where applicable).

Section 38 Severability.

Should any provision of this Local Law be declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of this Local Law as a whole or any part thereof other than the part so decided to be unconstitutional or invalid.

Section 39 Effective Date.

This Local Law shall be effective upon its filing with the Secretary of State in accordance with the Municipal Home Rule Law.