

Town Of Rumford
Chapter 33-D
Wind Energy Facility Ordinance
ADOPTED NOVEMBER 8, 2011

Section I - Purpose and Intent

This ordinance is adopted pursuant to 30-A M.R.S.A. § 3001, to protect the health, safety, and welfare of the Town of Rumford and its residents. This ordinance shall be known as the “Rumford Wind Energy Facility Ordinance.”

Section II - Applicability: Site Permit and Operational License

- (A) This ordinance applies to all Wind Energy Facilities (sometimes referred to as WEFs) proposed to be constructed or operated after the effective date of the ordinance, except that this ordinance does not apply to stand-alone Wind Turbines constructed primarily for on-site residential or farm use.
- (B) Wind Energy Facilities constructed prior to the effective date of this ordinance shall not be required to meet the Site Permit requirements of this ordinance, except that any modification to an existing Wind Energy Facility that materially alters the size, type or number of Wind Turbines (sometimes referred to as WTs) or other equipment shall require a Site Permit under this ordinance.
- (C) Wind Energy Facilities constructed prior to the effective date of this ordinance shall be required to obtain Operational Licenses pursuant to this ordinance within thirty (30) days of its effective date.
- (D) It shall be unlawful and a violation of this ordinance to begin construction and/or operation of a Wind Energy Facility without a Site Permit and Operational License.
- (E) No Wind Energy Facility may be operated without Site Plan approval and Operational License.
- (F) The burden of compliance with all aspects of this ordinance is on the Applicant and the Owner/Operator of a Wind Energy Facility. Approval of a Site Permit and Operational License by the Planning Board does not abrogate or reduce the responsibility of the Applicant or the Owner/Operator to comply with this ordinance. Consistent or repeated violations, particularly of the sound limits, shall lead to decommissioning and removal of the Wind Energy Facility.
- (G) This ordinance includes Sections I through XIV, together with the Appendix. Decisions regarding compliance or approval of an Applicant’s and/or Owner/Operator’s Site Permit and Operational License must be made in light of the entire ordinance.

Section III - Definitions

- (A) **Ambient Sound** includes all sound present in a given environment. It includes intermittent sounds, such as aircraft, barking dogs, wind gusts, mobile farm or construction machinery, and vehicles traveling along a nearby road. It also includes insect and other nearby sounds from birds, animals or people.

- (B) **Applicant** means the individual or business entity that seeks to secure a Permit or License under this ordinance.
- (C) **A-Weighted Sound Level (dBA)** is one measure of the overall sound level. This measure is designed to reflect the response of the human ear, which does not respond equally to all frequencies. Lower frequency sounds are given less weight than those in the mid-range of human perception. The resulting measure is said to be A-weighted and the units are dBA.
- (D) **C-Weighted Sound Level (dBC)** is similar to the A-weighted sound level (dBA), but it does not de-emphasize low frequencies to the extent that A-weighting does. For sounds with a significant low-frequency component, dBC is a more accurate measure of the energy of the sound waves than dBA.
- (E) **Cumulative Effects** evaluates the potential impacts of projects or additions to projects that may include but are not limited to the following: earth resources, vegetation, wetlands, wildlife, fisheries, water resources, health and safety, energy and natural resources, land use and recreation, socioeconomics, cultural resources, visual resources, transportation, air quality, noise and public services and utilities.
- (F) **Decibel (dB)** refers to a dimensionless quantity, which is proportional to the logarithm (base 10) of a ratio of two quantities that are proportional to the power, energy or intensity of sound. One of these quantities is a reference level relative to which all other levels are measured.
- (G) **Essential Wildlife Habitat** means areas identified by the Commissioner, Maine Department of Inland Fisheries and Wildlife, in accordance with the provisions of 12 M.R.S.A., Chapter 925, Subchapter 3, and any Department of Inland Fisheries and Wildlife rules implementing that Subchapter.
- (H) **Frequency** is the number of complete oscillations or cycles per unit of time.
- (I) **Height** means the total distance measured from the grade of the property as it existed prior to the construction of a WES, facility, tower, turbine, or related facility at the base to its highest point. In the case of a WT, this includes the length of the blade at its highest possible point.
- (J) **Measurement Point** refers to a location where sound and/or vibration are measured.
- (K) **Mitigation Waiver** means a legally enforceable, written agreement between the Applicant and a Non-participating Landowner in which the landowner waives certain setback, noise or other protections afforded in the Ordinance. A Parcel in which the landowner has entered into such an agreement becomes a Participating Parcel. A complete copy, except for any financial details, of any such agreement must be provided to the Planning Board and recorded in the Oxford County Registry of Deeds.
- (L) **Noise** means any sound produced by a WEF. Noise does need to be loud to constitute an interference with the health and well being of residents.
- (M) **Non-Participating Parcel** means a parcel of real estate that is neither a Project Parcel nor a Participating Parcel.
- (N) **Occupied Structure** means a building in which people live, work or frequent.

- (O) **Owner/Operator** means the person or entity with legal ownership of a WEF or WES, including successors and assigns, that has the authority and responsibility to operate the WEF on a day-to-day basis. An Owner/Operator must have the legal authority to represent and bind.
- (P) **Participating Parcel** means a parcel of real estate that is not a Project Parcel, but is subject to a Mitigation Waiver. A complete copy of the Mitigation Waiver, except any financial details, must be provided to the Planning Board, and filed with the Oxford County Registry of Deeds.
- (Q) **Project Boundary** means the boundaries of the WEF as shown on the site plan submitted to and approved by the Planning Board in accordance with this ordinance.
- (R) **Project Parcel** means any parcel(s) of real estate on which all or any part of a WEF will be constructed.
- (S) **Property Line** means the recognized and mapped property boundary line.
- (T) **Public Way** means any road capable of carrying motor vehicles, including, but not limited to, any state highway, municipal road, county road, unincorporated territory road or other road dedicated to the public.
- (U) **Qualified Independent Acoustical Consultant** Qualifications for persons conducting baseline and other measurements and reviews related to the Application for a WEF or for enforcement actions against an operating WEF include, at a minimum, demonstration of competence in the specialty of community noise testing and Board Certified Membership in the Institute of Noise Control Engineers (INCE). Certifications such as Professional Engineer (P.E.) do not test for competence in acoustical principles and measurement and are thus not, without further qualification, appropriate for work under this ordinance. The Independent Qualified Acoustical Consultant can have no direct or indirect financial or other relationship to an Applicant.
- (V) **Scenic or Special Resource** means a scenic resource of state or national significance, as defined in Title 35-A M.R.S.A. § 3451(9), any site registered in the National Registry of Historic Places, or a scenic or special resource of local significance identified as such in the Rumford Comprehensive Plan, or listed on the Visual Resource Inventory of the Rumford Comprehensive Plan in Section I, Inventory & Analysis of Scenic Resources.
- (W) **Sensitive Receptor** means places or structures intended for human habitation, whether inhabited or not, public parks, state and federal wildlife areas, the manicured areas of recreational establishments designed for public use, including but not limited to golf courses, camp grounds and other nonagricultural businesses. These areas are more likely to be sensitive to the exposure of the noise, vibration, shadow or flicker generated by a WEF. These areas include, but are not limited to: schools, daycare centers, elderly care facilities, hospitals, places of seated assemblage, nonagricultural businesses and residences.
- (X) **Significant Wildlife Habitat** as defined under Maine's Natural Resources Protection Act (NRPA) and administered by the Maine Department of Environmental Protection.

- (Y) **Town of Rumford** For the purpose of this document, the Town of Rumford shall hereinafter be referred to as “Town”.
- (Z) **Wind Energy System (WES)** means equipment that converts and then transfers energy from the wind into usable forms of energy on a large, industrial scale for commercial or utility purposes with sale off premises or onto the utility grid.
- (AA) **Wind Energy Facility (WEF)** means all of the land and equipment used by the Wind Energy System and its support facilities including the wind turbine, tower, access roads, control facilities, meteorological towers, maintenance and all power collection and transmission systems.
- (BB) **Wind Energy Facility Operational License or WEF Operational License** means a license to operate a Wind Energy System issued by the Planning Board in accordance with this ordinance.
- (CC) **Wind Energy Facility Site Permit or WEF Site Permit** means a Permit to construct a Wind Energy System issued by the Planning Board in accordance with this ordinance.
- (DD) **Wind Turbine or Turbine (WT)** means a mechanical device that captures the energy of the wind and converts it into electricity. The primary components of a wind turbine are the blade assembly, electrical generator and tower.

Section IV - Site Permit Application Procedures

- (A) Applications for a WEF Site Permit shall be submitted to the Planning Board at least seven (7) days prior to a Planning Board Meeting. The application for a WEF Site Permit shall include all of the information, documents, plans, deposits and other items required to be submitted with an application under Section V, a preliminary cost agreement and the fees referred to in Section VII, together with all other instances where this ordinance outline financial obligations of the Applicant, Permittee, Owner/Operator and Licensee. At least eight (8) copies of all written materials, including maps or drawings, shall be provided. Written materials shall be contained in a bound report.
- (B) Within ninety (90) days of the Planning Board receiving an application, the Planning Board shall, with assistance from such staff, consultants, committees or commissions as it deems appropriate, notify the Applicant in writing either the application is a complete application or, if the application is incomplete, the specific additional material needed to make a complete application. The determination of completeness shall be made in a public Planning Board meeting.
- (C) The Planning Board shall hold a public hearing within forty-five (45) days of the date of determination of a complete application. The Planning Board shall publish the time, date, and place of the hearing at least two (2) times, the date of the first publication to be at least seven (7) days prior to the hearing in a newspaper of area wide circulation. The Planning Board shall notify abutting landowners, by certified mail, of the hearing. Public hearings by the Planning Board shall be conducted according to the procedures outlined in Title 30-A M.R.S.A. Section 2691, Subsection 3 (A), (B), (C), (D), and (E).
- (D) After the Planning Board determines that an application is complete, the Planning Board shall determine whether the application meets all requirements

of this ordinance. In determining whether the application meets the requirements of this ordinance, the Planning Board may obtain assistance from such staff and consultants, as it deems appropriate.

- (E)** Within ninety (90) days of the public hearing the Planning Board shall approve the application with conditions, or disapprove the application. The time limit for review may be extended by mutual agreement between the Planning Board and the Applicant.
- (F)** The Planning Board shall make findings of fact and conclusions relative to the standards contained in this ordinance. If the Planning Board finds that all standards have been met, they shall approve the application. If the Planning Board finds that any of the standards of this ordinance have not been met, the Planning Board shall either deny the application or approve the application with conditions to ensure all of the standards will be met. The reasons for any conditions shall be stated in the findings of facts and conclusions.
- (G)** An aggrieved party may appeal the decision of the Planning Board on the application under this ordinance within thirty (30) days from the date of the decision to the Board of Appeals.
- (H)** Any significant modification of the approved WEF, such as but not limited to, the number of WTs, tower height, tower locations, turbine design and specifications shall require the Applicant to obtain an amended Site Permit from the Planning Board, pursuant to this ordinance. The application procedures and permit requirements and standards for amending a Site Permit are the same as for an initial application.
- (I)** An Application for a WEF Site Permit shall include the following information and meet the following requirements. Items that are considered to be part of the Site Plan are followed by "(SP)" in the list below:
 - (1)** The Applicant's name, address and phone number, and the name, address and phone number of the Owner/Operator, if different.
 - (2)** A narrative describing the proposed WEF, including an overview of the project, the project location, and the generating capacity and expected megawatt production of the WEF.
 - (3)** Evidence of the Applicant's technical and financial ability to implement the project as proposed.
 - (4)** An overview map that includes the extent of the entire Town, showing all roads, together with the location of all WTs, access roads, power transmission lines, and any other features of the WEF deemed to be relevant by the Planning Board. (SP)
 - (5)** The tax map and lot number of all Project Parcels. (SP)
 - (6)** For any Project Parcel that is not owned by the Applicant, a copy of any agreement(s) between the owner of the Project Parcel and the Applicant and/or the Owner/Operator.

- (7)** The boundaries of all Project Parcels, surveyed by a Maine Professional Land Surveyor, with name, registration number and seal of the surveyor provided. (SP)
- (8)** The boundaries of all Participating Parcels. (SP)
- (9)** The boundaries of all Non-Participating Parcels located within four thousand (4,000) feet of any proposed WTs, together with the distance to, and bearing to, all boundary lines relative to each proposed WT, as measured from the nearest point of the property line to the WT. A Maine Professional Land Surveyor shall provide this information. (SP)
- (10)** The names, addresses and phone numbers of the owners of all Project Parcels, Participating Parcels, and Non-Participating Parcels located within four thousand (4,000) feet of any proposed WT, with each property owner's status indicated (Project Parcel, Participating Parcel or Non-Participating Parcel), including the book and page reference of the identified owner's interest as recorded in the Oxford County Registry of Deeds.
- (11)** An aerial photo showing all Project Parcels, Participating Parcels, and Non-Participating Parcels located within four thousand (4,000) feet of any proposed WT.
- (12)** Existing zoning of each Project Parcel and all required zoning setbacks on each Project Parcel. (SP)
- (13)** The location of all components of the WEF, including but not limited to the WTs, access roads, control facilities, meteorological towers, turnout locations, substation(s), ancillary equipment, buildings, structures, and temporary staging areas, together with maintenance and all power collection and transmission systems. (SP)
- (14)** The location and description of all structures located on Project Parcels, and all occupied structures located on Participating and Non-Participating Parcels located within four thousand (4,000) feet of any proposed WT. (SP)
- (15)** Dimensional representation and sizes of the structural components of the tower construction including the base, footings, tower, and blades. (SP)
- (16)** The distance between each WT tower and each of the following shall be shown on the site plan: those structures listed in (14), above, above-ground utility lines, telephone lines, towers, and public ways located within four thousand (4,000) feet of any proposed WT. (SP)
- (17)** Schematic of electrical systems associated with the proposed WEF including all existing and proposed electrical connections.
- (18)** Manufacturer's specifications and installation and operation instructions.
- (19)** The direction of proposed surface water drainage across and from Project Parcels and Participating Parcels, with an assessment of impacts on downstream properties and water resources, including, but not limited to, streams and wetlands. (SP)

- (20) The location of any of the following found within four thousand (4,000) feet of any proposed WT: open drainage courses, wetlands, and other important natural areas and site features, including, but not limited to, floodplains, deer wintering areas, Essential Wildlife Habitats, Significant Wildlife Habitats, Scenic or Special Resources, habitat of rare and endangered plants and animals, unique natural areas, sand and gravel aquifers and historic and/or archaeological resources, together with a description of such features. (SP)
- (21) Provisions made for handling all solid wastes, including hazardous and special wastes and the location and proposed screening of any on-site collection or storage facilities. (SP)
- (22) The location, dimensions and materials to be used in the construction of proposed roads, driveways, parking areas and loading areas, together with an assessment of any changes to traffic flow. (SP)
- (23) A topographical overlay for the Project Parcel(s), Participating Parcels and Non- Participating Parcels located within four thousand (4,000) feet of any proposed WT.
- (24) The size and scale of maps and diagrams shall be as determined by the Planning Board, and shall include a north arrow, the date, the scale, and date and seal of a Maine Professional Land Surveyor or professional engineer. (SP)
- (25) The site plan shall include such additional information as may be deemed required by the Planning Board in light of the specific conditions of the property or surrounding areas, provided such information directly relates to the standards of approval for WEFs set forth in this ordinance. (SP)
- (26) A phased project plan that indicates how the WEF will comply to the Site Permit Requirements and Standards identified in Section V(S). (SP)

Section V - Site Permit Requirements and Standards

(A) Sound Modeling, Sound Standards and Sound-Related Enforcement Procedures

- (1) **Independent Pre-licensing Sound Study.** An Application for a WEF Site Permit shall include a four season sound study as specified in Appendix "A". A Qualified Independent Acoustical Consultant shall conduct this study. The Planning Board shall retain a Qualified Independent Acoustical Consultant. The consultant will review this study and assist the Planning Board in determining whether the proposed WEF will comply with the sound limits set forth in this ordinance. The Applicant shall provide financial surety that the cost of the study, and its review, will be borne by the Applicant, in accordance with Section VII of this ordinance. Refer to Appendix "A" for sound study information.
- (2) **Sound Limits** No site permit shall be issued if the pre-licensing information of sound study indicates that the proposed WEF will not comply with the following requirements, which are to apply everywhere within four thousand (4,000) feet of any WT, except on a Project Parcel(s) or on a Participating Parcel(s) which is subject to a Mitigation waiver which specifies different

sound limits than those below. If pre-construction estimates of the post-construction sound levels exceed the limits below, then the WEF application will be denied; if these limits are exceeded after the WEF has been built, then the WEF will be in violation of this ordinance.

a. Audible Sound Limit

- i. No WT, WES or WEF shall be located so as to generate post-construction audible sound levels that exceed forty (40) dBA at night (7:00 p.m. to 7:00 a.m.) or fifty (50) dBA during the day (7:00 a.m. to 7:00 p.m.).
- ii. A five (5) dB penalty is applied for tones as defined in the International Standards of the International Electrotechnical Commission's 61400-11.

b. Low Frequency Sound Limit

- i. The Post-construction Low Frequency Background sound level minus the Pre-construction low frequency sound level must be less than twenty (20) dB outside of any occupied structure property line.
- ii. The Post-construction low frequency sound level shall not exceed fifty (50) dBC, without contribution from other ambient sounds, for properties located one (1) mile or more away from state highways or other major roads, and it may not exceed fifty-five (55) dBC for properties closer than one (1) mile from a state highway or other major road.

(3) **Mitigation Waiver** Property owners may waive these sound restrictions with a written Mitigation Waiver agreement. A complete copy of any such agreement, except any financial details, must be filed with the Planning Board and Recorded in the Oxford County Registry of Deeds.

(4) **Post-construction Sound Measurements** Starting within twelve (12) months after the date when the WEF is operating, a post-construction sound study shall be performed with all WTs operating. A Qualified Independent Acoustical Consultant chosen by the Planning Board shall conduct post-construction sound studies. The Permittee will provide financial surety that the costs of these studies shall be paid by the Permittee. The surety required by Section VII shall include these costs. A Consultant of the Permittee may observe the Town's consultant. The WEF Permittee shall provide all technical information required by the Planning Board or Qualified Independent Acoustical Consultant before, during, and/or after any acoustical studies required by this document and for local area acoustical measurements. The post-construction sound measurements shall be repeated at least every five (5) years throughout the life of the facility.

(B) Set-Back Requirements

- (1) A WEF shall comply with the following setback requirements, which shall apply in addition to the site requirements found elsewhere in this ordinance. If more than one (1) setback requirement applies, the greater setback distance shall be met.
 - a. All parts of a WEF shall comply with all applicable setback requirements in the Town's ordinances.
 - b. Each WT shall be set back at least four thousand (4,000) feet from the property line of any Non-Participating Parcel. Property owners may waive this setback with a written Mitigation Waiver agreement.
 - c. WT's shall have a safety set back distance equivalent to one hundred-fifty per cent (150%) of the turbine height from public and private rights-of-way, and any above-ground electric power line or telephone line that are not part of the proposed generating facility except that a lesser setback shall be permitted if the utility agrees, in writing, and this agreement is approved by the Planning Board.
 - d. All WTs must be set back a minimum of three thousand (3,000) feet from any Scenic or Special Resource as defined in Section III.
 - e. All setback distance measurements shall be based on horizontal distances.
- (2) If at any time it appears necessary or desirable to modify the approved plans before or during construction of the WEF, the Code Enforcement Officer is authorized to approve minor modifications due to unforeseen circumstances such as encountering hidden outcrops of bedrock, natural springs, etc. The Code Enforcement Officer shall issue any approval under this section in writing and shall transmit a copy of the approval to the Board of Selectpersons and Planning Board. Revised plans shall be filed with the Planning Board for the record. For major modifications, such as relocation of rights-of-way, relation of WT's changes in grade by more than one percent (1%), etc the Applicant shall submit to the Planning Board an amended plan for review and approval. The Code Enforcement Officer may supervise an Inspecting Official whom is an individual appointed by the Town and paid for by the Applicant to oversee project development to assure compliance with the ordinance and any conditions of approval.
- (3) All construction activities must conform to the approved site plan, including any conditions of approval and minor changes approved by the Inspecting Official and/or Planning Board to address field conditions.
- (4) Upon completion of the project, the Permittee must provide the Planning Board with a set of construction plans showing the structures and site improvements as actually constructed. These "as-built" plans must be submitted within thirty (30) days of completion of the WEF, and before commencement of operation of the WEF.

(C) Plan and Risk Assessment for Road and Property Use

- (1) An Application for a WEF Site Permit shall include a road and property use and risk assessment plan containing the following information and meeting the following requirements.

- a. A description and map of all public ways, and other property, in the Town to be used or affected in connection with the construction of the WEF, including a description of how and when such ways and property will be used or affected.
- b. A description of the type and length of vehicles and type, weight and length of loads to be conveyed on all public ways in the Town.
- c. A complete assessment of the proposed use of public ways in the Town in connection with the construction of the WEF, including the adequacy of turning radii; the ability of the public ways to sustain loads without damage; the need to remove or modify (permanently or temporarily) signs, trees, utilities, or anything else; any reasonably foreseeable damage to public ways or other property, public or private; any reasonably foreseeable costs that the Town may incur in connection with the use of property in the Town, including but not limited to costs relating to traffic control, public safety, or damage to public ways, or to other public or private property.
- d. A traffic control and safety plan relating to the use of public ways in the Town in connection with the construction of the WEF.
- e. Any additional relevant information that the Planning Board may request relating to the use of public ways or other effects on public and private property that may occur in connection with the construction and operation of the WEF.

(2) The Planning Board will evaluate the risk assessment plan with assistance from such consultants that it deems appropriate, including without limitation a third-party engineer chosen by the Planning Board, the cost to be solely borne by the Applicant. The Planning Board shall document the condition of public ways and other property to be used in connection with the construction of the WEF in such manner, as it deems appropriate. The Planning Board may require changes to the risk assessment plan that it deems to be appropriate to protect public safety, to protect public and private property, and to address anticipated costs to the Town associated with construction of the WEF.

(3) If the Applicant requires the temporary closure of any public way, the Planning Board may require the Applicant to enter into an agreement relating to the use of the public way.

(4) The Applicant shall be responsible for paying for any damage to any public way if the risk assessment anticipates damage to any public way, the Planning Board shall require the Applicant to provide a surety in an amount that the Planning Board determines appropriate to secure any obligations under the agreement, including but not limited to any obligation relating to alterations, damages or modifications to public ways made in connection with the Applicant's activities.

(D) Design Plan and Design Requirements

An Application for a WEF Site Permit shall include a design plan containing the information and meeting the following requirements:

- (1) The total height of any WT shall not exceed four hundred-fifty (450) feet above grade, as measured to the blade tips at their maximum distance above grade.
- (2) WTs shall be painted a non-reflective, non-obtrusive color.
- (3) The design of the buildings shall, to the extent reasonably feasible, use materials; colors, textures, screening and landscaping that will blend with and be compatible with the natural setting and the existing environment.
- (4) WTs shall not be artificially lighted, except to the extent required by law, and strobe or other intermittent lights are prohibited unless required by law.
- (5) No advertising or display shall be permitted, other than reasonable identification of the manufacturer or operator of the WTs or WEF.
- (6) Electrical controls and control wiring and power-lines must be wireless or belowground, except where WEF collector wiring is brought together for connection to the utility grid.
- (7) The clearance between the ground and the WT blades shall be not less than twenty-five (25) feet.

(E) Additional Protection Requirements

The application shall include a statement from the Federal Aviation Administration that the proposed WEF will not pose a hazard to aircraft. The Applicant must also provide memoranda from the Maine Department of Inland Fisheries and Wildlife (MDIFW) Environmental Coordinator and from the Maine Natural Areas Program (MNAP) outlining any concerns that these bodies may have with the proposed WEF. In the absence of any such concerns, the Applicant must provide copies of correspondence with these bodies showing that no such concerns exist. The Applicant must demonstrate that the proposed WEF will not have an undue adverse effect on rare, threatened, or endangered wildlife, Significant Wildlife Habitat, Essential Wildlife Habitat, rare, threatened or endangered plants and rare and exemplary natural plant communities and ecosystems.

(F) Sound from Construction of a Facility and Blasting Plan

- (1) The sound from construction activities between 7:00 pm and 7:00 am is subject to the following limits:
 - a. Sound from nighttime construction activities shall not exceed Section V (A)(1).
 - b. If construction activities are conducted concurrently with routine operation of the facility, then the combined total of construction and routine operation sound shall be subject to the nighttime routine operation sound level limits contained in Section V(A)(1).

c. Higher levels of nighttime construction sound are permitted when a duly issued permit authorizing nighttime construction sound in excess of these limits has been granted by the Code Enforcement Officer.

(2) Sound from construction activities, except from blasting, between 7:00 am and 7:00 pm shall not exceed the following limits at any Protected Location:

Duration of Activity	Hourly Sound Level Limit
12 hours	87 dBa
8 hours	90 dBa
6 hours	92 dBa
4 hours	95 dBa
3 hours	97 dBa
2 hours	100 dBa
1 hour or less	105 dBa

(3) All equipment used in construction on the facility site shall comply with applicable federal noise regulations and shall include environmental noise control devices in proper working condition, as originally provided with the equipment by its manufacturer.

(4) The Applicant of a WEF shall not commence blasting without notifying the Town's Code Enforcement Officer and submitting a blasting plan in accordance with the latest Maine Department of Environmental Protection standards. The Applicant must execute this plan, and bears sole responsibility for the associated costs. The blasting plan shall be reviewed and approved by the Code Enforcement Officer within ten (10) days of receipt before any blasting takes place. All blasting shall comply with Title 38 MRSA § 490-Z 14.

(5) A pre-blast survey is required and must extend a minimum radius of one (1) mile (measured horizontally) from the blast site. The information gathered by the survey must be satisfactory to the Planning Board. Pre-blast surveys should include both the interior and exterior of each structure. The pre-blast survey must document any pre-existing damage to structures and buildings and any other physical features within the survey radius that could reasonably be affected by blasting. Assessment of features such as pipes, cables, transmission lines and wells and other water supply systems may be limited to surface conditions and other readily available data, such as well yield and water quality. The pre-blast survey must be conducted prior to the initiation of blasting. The contractor or subcontractor shall retain a copy of all pre-blast surveys for at least one (1) year from the date of the last blast on the development site.

(6) The Applicant shall provide notification that blasting will occur to all property owners of structures to be surveyed at least ten (10), but not more than thirty (30), days prior to commencement of blasting. The results of the pre-blast survey must be provided to the property owner no later than the date on which this notification is given.

(7) The contractor or the subcontractor is not required to conduct a pre-blast survey on properties for which the Applicant or Owner/Operator

documents the rejection of an offer by registered letter, return receipt requested, to conduct a pre-blast survey. Any person owning a building within a pre-blast survey radius may voluntarily waive the right to a survey.

- (8) Blasting timeframes shall be coordinated with the local emergency responders, or as otherwise restricted by the local Fire Department. Blasting shall not occur between the hours of 7:00 p.m. and 7:00 a.m. No blasting shall be done on weekends or holidays.

(G) Signal Interference Requirements

The WEF shall not cause any disruption or loss of radio, telephone, television or similar signals. The Applicant shall further provide a statement from the Federal Communications Commission (FCC) that the proposed WEF will not cause any disruption of licensed radio, television, satellite, and cellular or similar signals.

(H) Shadow Flicker

(1) Shadow flicker occurs when the blades of a WT pass between the sun and an observer, casting a readily observable, moving shadow on the observer and his or her immediate environment. The application shall include a detailed shadow flicker assessment model and an estimate of the expected amount of flicker. The study shall include a paint sample that demonstrates the color, texture and gloss of the proposed surface coating and that the proposed surface coating will not create a reflective surface.

(2) WEFs may not cause an unreasonable adverse shadow flicker effect at any occupied structure on a Non-Participating Landowner's property. For the purpose of this section, "unreasonable adverse shadow flicker" means shadow flicker occurring for three (3) days or more in any one (1) month that, if annualized, would total more than twelve (12) hours of flicker per year. The application will not be approved if the study estimates that the duration of the flicker will be such that there are more than twelve (12) hours of flicker per year at any occupied structure located on a Non-Participating Parcel. If after construction, the WEF violates this condition, then the WEF will be in violation of this ordinance.

(3) Property owners may waive these shadow flicker restrictions with a written Mitigation Waiver agreement. A complete copy of any such agreement, except any financial details, must be filed with the Planning Board and Recorded in the Oxford County Registry of Deeds.

(I) Sign Plan and Sign Requirements

An application for a WEF Site Permit shall include a sign plan meeting the requirements in this section:

(1) The plan shall provide reasonable signage at the WEF, identifying the Project Parcels as being part of the WEF and providing appropriate safety notices and warnings.

(2) No advertising material or signage other than warning, equipment information or indicia of ownership shall be allowed on the WTs. This prohibition shall

include the attachment of any flag, decorative sign, streamers, pennants, ribbons, spinners or waving, fluttering or revolving devices, but not including weather devices.

- (3) The address and phone number of the Owner/Operator and Licensee shall be posted on all access points from public roads.

(J) Stray Voltage Assessment and Requirements

- (1) An application for a WEF Site Permit shall include reports of stray voltage analyses in accordance with this section. The Applicant shall conduct and include a report of a preconstruction stray voltage test on all buildings located within a one (1) mile radius of the Project Parcels. An investigator, approved by the Planning Board, using a testing protocol, which is approved by the Planning Board, shall perform the tests. A report of the tests shall be provided with the WEF Site Permit application and shall be provided to the owners of all property included in the study area. Applicant shall seek written permission from property owners prior to conducting testing on such owners' property. Applicant shall not be required to perform testing on property where the owners have refused to grant permission to conduct the testing.
- (2) Following construction of the WEF and within one (1) year after commencing operation, the Applicant shall conduct a post-construction stray voltage test on all buildings located within a one (1) mile radius of the Project Parcels. An investigator approved by the Planning Board shall perform the tests and shall be performed using a testing protocol, which is approved by the Planning Board. A report of the tests shall be provided to the Planning Board and to the owners of all property included in the study area. Applicant shall seek written permission from property owners prior to conducting testing on private property. Applicant shall not be required to perform testing on property where the owners have refused to grant permission to conduct the testing.
- (3) The Applicant or subsequent holder of the Operational License shall provide neutral isolation devices to property owners where testing reveals neutral-to-earth voltages in excess of zero point five (0.5) volts caused by the WEF.
- (4) The Applicant or subsequent holder of the Operational License shall be responsible for all costs incurred with the pre- and post-construction test.

(K) Security Plan and Requirements

The application shall include a security plan that contains the information and meets the requirements in this section:

- (1) The outside of WTs shall not be climbable.
- (2) All access doors to the towers and electrical equipment shall be locked.
- (3) Warning signs shall be placed on each WT, all electrical equipment, and each entrance to the WEF.

(L) Fire Prevention and Emergency Response Plan and Requirements

An application for a WEF Site Permit shall include a fire prevention and emergency response plan containing the information and meeting the requirements in this section. The plan shall describe the potential fire and emergency scenarios that may require a response from fire, emergency medical services, police or other emergency responders. The plan shall designate the specific agencies that would respond to potential fire or other emergencies, shall describe all emergency response training and equipment needed to respond to a fire or other emergency, shall include an assessment of the training and equipment available to the designated agencies, and shall provide for any special training or emergency response equipment that the designated agencies need to use in responding to a potential fire or other emergency. The study shall be conducted at Applicant's cost and the Applicant shall pay for the cost of any training or equipment required by local fire and emergency responders.

Access to the WEF and construction area(s) shall be constructed and maintained following a detailed erosion control plan in a manner designed to control erosion and to provide maneuverability for service and emergency response vehicles and must also meet all local safety and emergency requirements.

(M) Emergency Shutdown Plan and Requirements

An application for a WEF Site Permit shall include an emergency shutdown plan. The plan shall describe the circumstances under which an emergency shutdown may be required to protect public safety, and shall describe the procedures that the Town and the Owner/Operator and Licensee will follow in the event an emergency shutdown is required.

(N) Decommissioning

An application for a WEF Site Permit shall include a decommissioning plan containing the information and meeting the requirements in this section:

- (1) An independent and certified Licensed Professional Engineer shall be retained by the Planning Board at the WEF Applicant's cost to estimate the total cost of decommissioning of the equipment without regard to salvage value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: turbine removal, turbine foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization and road infrastructure removal and permanent stabilization. Said estimates shall also be submitted to the Town after the first year of operation and every other year thereafter reflecting current year values.
- (2) The Decommissioning Plan shall demonstrate the financial assurance to the satisfaction of the Board of Selectpersons which may be in the form of a performance bond, surety bond, or other form of financial assurance including tender to the Treasurer of the Town for escrow as provided by section VII (C)(3) in an amount acceptable to the Board of Selectpersons. The provision of financial assurance shall be in place of 100% of the total

cost of decommissioning as determined in accordance with Section V (N)(1). The Applicant and/or Owner/Operator shall post and maintain decommissioning funds in an amount no less than fifty per cent (50%) of the total decommissioning costs prior to construction and increased annually by twelve and one half per cent (12.5%) in years two (2) through five (5). After year five (5) years, at no time shall decommissioning funds be less than one hundred per cent (100%) of Decommissioning Costs.

(3)The Owner/Operator shall, at its expense, complete decommissioning of the WEF as follows:

- a. Within twelve (12) months after the end of the useful life of the WEF, or;
- b. As specified in the materials provided at the time of application or;
- c. The WEF will be presumed to be at the end of its useful life if no electricity is generated for a continuous period of twelve (12) months.

(4) Decommissioning shall include removal of WTs and foundations to a depth of twenty-four (24) inches. All buildings, cabling, electrical components, roads, and any other associated facilities shall be removed unless, at the end of the WT or WEF's useful life, as determined in accordance with Section V (N)(3), the Applicant provides written evidence of plans for continued beneficial use of these components of the WEF, and this evidence is approved by the Planning Board.

(5) Except as otherwise provided by Section V (N)(4), disturbed earth shall be graded and re-seeded, unless the Participating Landowner of the affected land requests otherwise in writing.

(6) If the Owner/Operator fails to complete decommissioning within the period prescribed by Section V (N)(3), then the Participating Landowner shall have an additional six (6) months to complete the decommissioning.

(7) If neither the Owner/Operator, nor the Participating Landowner completes decommissioning within the periods prescribed by Sections V (N)(3) and (N)(6), the WT or WEF shall be deemed in violation of this ordinance and the Town Code Enforcement Officer may take such measures as necessary, including court action, to ensure the completion of decommissioning. The entry into and submission of evidence of a Participating Landowner agreement to the Town Planning Board and Code Enforcement Officer shall constitute agreement and consent of the Parties to the agreement, their respective heirs, successors and assigns that the Town may take such action as necessary to implement the decommissioning plan.

(8) The escrow agent shall release the decommissioning funds when the Owner/Operator has demonstrated and the Code Enforcement Officer concurs that the decommissioning has been satisfactorily completed, or upon written approval of the Town Planning Board and Code Enforcement Officer in order to implement the decommissioning plan.

(9) Any and all costs incurred by the Town to initiate the decommissioning process shall be included in and paid for with decommissioning funds.

(O) Mitigation Waiver Agreement

Non-Participating Landowners may waive certain specified protections in this Ordinance using a written, legally enforceable Mitigation Waiver negotiated between the WT Applicant and the Non-Participating Landowner, who thereby becomes a Participating Landowner. Complete copies of executed Mitigation Waivers, except any financial details, must be included with the submission of the WEF Application. The Mitigation Waiver agreement, except any financial details, must be recorded in the Oxford County Registry of Deeds, and describe the benefited and burdened properties. Any subsequent deed must advise all subsequent owners of the burdened property.

(P) Inspections

WTs shall be inspected after construction is completed but before becoming operational, and at least every two (2) years thereafter, for structural and operational integrity by a Maine Licensed Professional Engineer, and the Owner/Operator and/or Licensee shall submit a copy of the inspection report to the Planning Board. If such report recommends that repairs or maintenance be conducted, then the Owner/Operator and/or Licensee shall provide the Planning Board with a written schedule for the repairs or maintenance. Failure to complete the repairs or maintenance in accordance with the schedule shall be deemed a violation of this ordinance. Additional inspection by a Maine Licensed Professional Engineer will be required following an operational failure.

(Q) Liability Insurance

The Applicant, Owner/Operator and Licensee, as applicable, shall maintain a current general liability policy for the WEF that covers bodily injury and property damage in an amount commensurate with the scope and scale of the WEF, and acceptable to the Planning Board, which acceptance shall not be unreasonably withheld. Certificates of Insurance shall be provided to the Planning Board annually.

The policy must include the requirement that the Planning Board will be provided at least ten (10) days notice by the policy provider in the case of cancellation or change to the policy. In addition, the Applicant, Owner/Operator and Licensee, as applicable, must inform the Planning Board of such changes.

(R) Construction Codes

- (1) All wiring shall be installed underground according to the State of Maine's applicable electrical requirements.
- (2) All construction shall be conducted in accordance with the Maine Uniform Building and Energy Code.

(S) Project Phasing Plan

The WEF shall be designed and developed according to the approved Project Phasing Plan. The Project Phasing Plan will include the following:

(1) Site plans and narrative that sets forth how the WEF will be developed to comply with the individual standards.

- a. The area to be cleared of vegetation, grubbed and excavated shall not exceed the land necessary for a WEF that reasonably can be completed within twelve (12) months from the date of start of any clearing of vegetation, grubbing and/or excavation.
- b. Each subsequent phase of the Project Phasing Plan may begin upon certification that the previous plan has been constructed as approved.

(2) The Planning Board may, for good cause shown, grant a one (1) time extension of up to twelve (12) months for completion of construction of any phase provided such request is submitted prior to the lapse or expiration of the Site Permit.

(T) Public Inquiries and Complaint

(1) The Applicant or its designee shall maintain a phone number and identify a responsible person for the public to contact with inquiries and complaints throughout the life of the WEF.

(2) The Applicant or its designee shall make reasonable efforts to respond to the public's inquiries and complaints and shall provide written copies of all complaints and the company's resolutions or response to the Code Enforcement Officer upon request.

(U) Community Benefits

The Applicant must demonstrate that substantial community benefits will accrue to the Town as a result of the construction and operation of the WEF. In addition to any other demonstration of community benefits, including significant tangible benefits provided for in a Community Benefits Agreement entered into by the Applicant and the Town, the Applicant must identify the tax value, direct payments, or other financial benefits to be realized, and the form and duration of such benefits, and the short-term and long-term jobs to be created, telecommunication infrastructure enhancements or other economic benefits to be realized and the duration of such benefits. Other community benefits may include, but are not limited to, use of generated electrical power, wildlife habitat, tourism/recreational and environmental improvements and/or enhancements, educational opportunities and any other benefits in kind that the Town may wish to pursue. Community benefits will be maintained through any Ownership changes.

(V) Wind Turbine Limits

The Town may deny approval of a WEF or limit the total number of WTs to be installed based on the need to study each project, manage growth and/or consider any cumulative effects.

Section VI - Operational License

(A) A WEF Operational License will be issued when all provisions of this ordinance have been complied with. A Provisional Operational License will be granted to the Owner/Operator until post construction testing is complete. The Operational

License shall be renewed every five (5) years. Applications for a WEF Operational License shall be submitted to the Planning Board at least seven (7) days prior to the Planning Board meeting.

(B) The initial application for a WEF Operational License shall include the following items:

- (1)** The Applicant's name, address and phone number, and the name, address and phone number of the Owner/Operator, if different;
- (2)** An emergency directory for the Owner/Operator sufficient to allow the Town to contact the Owner/Operator at any time;
- (3)** A signed statement from the Applicant that the Applicant agrees to assume full responsibility for complying with the provisions of this ordinance and the Site Permit, including agreeing to continue or complete any duties and obligations of the former Operational License holder under this ordinance or former Operational License, including, but not limited to, the requirement for post-construction sound measurements, post-construction stray voltage testing, WT inspections, and submission to inspections.

(C) An application for the renewal of a WEF Operational License shall include the following items:

- (1)** Evidence of the Applicant's technical and financial ability to operate the WEF in accordance with this ordinance, the Site Permit, and the Operational License;
- (2)** For any Project Parcel that is not owned by the Applicant, a copy of any agreement(s) between the owner of the Project Parcel and the Applicant;
- (3)** An updated Security Plan in accordance with the requirements of Section V(K);
- (4)** An updated Fire Prevention and Emergency Response Plan in accordance with the requirements of Section V(L);
- (5)** An updated Emergency Shutdown Plan in accordance with the requirements of Section V(M);
- (6)** An updated Decommissioning Plan in accordance with Section V(N);
- (7)** Updated liability insurance information in accordance with the requirements of Section V(Q).

(D) Within ninety (90) days of the Planning Board receiving an application, the Planning Board shall, with assistance from such staff, consultants, committees or commissions as it deems appropriate, notify the Applicant in writing either that the application is a complete application or, if the application is incomplete, the specific additional material needed to make a complete application.

(E) The Planning Board shall hold a public hearing within forty-five (45) days of the date of determination of a complete application. The Planning Board shall publish the time, date, and place of the hearing at least two times, the date of the first

publication to be at least seven (7) days prior to the hearing in a newspaper of area wide circulation. The Planning Board shall notify the abutting landowners, by certified mail, of the hearing. Public hearings by the Planning Board shall be conducted according to the procedures outlined in Title 30-A M.R.S.A. Section 2691, Subsection 3 (A),(B),(C), (D), and (E).

- (F) After the Planning Board determines that an application is complete, the Planning Board shall determine whether the application meets all requirements of this ordinance. In determining whether the application meets the requirements of this ordinance, the Planning Board may obtain assistance from such staff and consultants, as it deems appropriate.
- (G) Within ninety (90) days of the public hearing the Planning Board shall approve the application with conditions, or disapprove the application. The time limit for review may be extended by mutual agreement between the Planning Board and the Applicant.
- (H) The Planning Board shall make findings of fact and conclusions relative to the standards contained in this ordinance. If the Planning Board finds that all standards have been met, they shall approve the application. If the Planning Board finds that any of the standards of this ordinance have not been met, the Planning Board shall either deny the application or approve the application with conditions to ensure all of the standards will be met. The reasons for any conditions shall be stated in the findings of facts and conclusions.
- (I) An aggrieved party may appeal the decision of the Planning Board on the application under this ordinance within thirty (30) days from the date of the decision to the Board of Appeals.

Section VII - Fees and Costs

- (A) **Preliminary Cost Agreement** At the time an application for a WEF Site Permit is filed with the Planning Board, the Applicant shall execute for the benefit of the Town an agreement to pay and provide adequate surety guaranteeing payment of the cost of the investigation, review and processing of the application, including without limitation by way of enumeration, legal, engineering, acoustical, planning, environmental, and staff administrative costs as provided in this ordinance. The agreement shall provide for the establishment of an escrow account and cash deposit to be provided by the Applicant in an amount deemed sufficient by the Planning Board to begin review under this ordinance. The Town may use the funds in the escrow account in connection with the application review as allowed by this ordinance. In the event that the cash deposit in escrow is insufficient to complete the review, the Planning Board shall notify the Applicant that additional funds are necessary and of the amount reasonably believed necessary to complete the review, and the Applicant shall provide the additional funds. The Planning Board shall not begin processing, or in the case of where additional funds are requested, shall not continue processing, the application until the preliminary cost agreement is approved and signed and until the required surety, or additional surety, and/or funds, are provided to the Town.
- (B) **Enforcement of Violation Agreement** Upon approval of a WEF Site Permit, the Applicant shall execute for the benefit of the Town an agreement to pay and provide adequate surety guaranteeing payment of the cost of the enforcing the provisions of the ordinance and any conditions of the approval. The agreement shall provide for the establishment of an escrow account and cash deposit to be

provided by the Applicant in an amount deemed sufficient by the Planning Board. The Town may use the funds in the escrow account in connection with the enforcement of this ordinance. In the event that the cash deposit in escrow is insufficient to complete the review, the Planning Board shall notify the Applicant that additional funds are necessary and of the amount reasonably believed necessary to complete the review, and the Applicant shall provide the additional funds.

(C) Escrow Accounts

- (1) Any funds required by these provisions under a WEF application, construction, operation, and decommissioning shall be tendered to the Treasurer of the Town. The escrowed funds shall be held in an interest bearing account of the WEF Applicant and/or Owner/Operator.
- (2) The Applicant and/or Owner/Operator for a WEF shall tender funds payable to the Treasurer of the Town for escrow in the sum approved by the Board of Selectpersons as sufficient to review the WEF application.
- (3) The Applicant and/or Owner/Operator shall tender funds payable to the Treasurer of the Town for escrow in the sum approved by the Board of Selectpersons as sufficient to fund a Decommissioning Plan if required by the Board of Selectpersons under the WEF application review.

(D) Application Fees The application fee for a Site Permit and a WEF Operational License Fee shall be from the Town's Fee Schedule.

Section VIII - Expiration of Site Permit Approval and WEF Operational License

- (A) If an approved WEF and/or phase of a WEF are not substantially completed within approved time period, then the Site Permit shall expire, and the Applicant must reapply. The Planning Board may, for good cause shown, grant extensions of up to twelve (12) months for either start of construction or substantial completion of construction provided such request is submitted prior to the lapse or expiration of the Site Permit.
- (B) A WEF Operational License issued under this ordinance shall expire five (5) years after the date it is issued, unless earlier terminated.
- (C) A WEF Operational License shall be deemed abandoned if its operation has ceased for twelve (12) consecutive months. An Operational License expires immediately upon abandonment.
- (D) A WEF Operational License shall automatically terminate upon transfer of ownership or operation of the WEF. The proposed new Owner or Operator shall be required to obtain a new Operational License, which must be in place prior to the transfer of ownership or operation of the WEF.
- (E) A WEF Operational License shall automatically terminate upon any amendment to a Site Permit other than a minor change approved by the Planning Board in accordance with Section V(B)(2).

Section IX - Violations, Complaints and Penalties

Any violations, complaints, and penalties will be governed by the Town's Site Plan Ordinance.

Section X - Maintenance, Amendments, and Miscellaneous Requirements

- (A) A WEF shall be constructed, operated, and maintained, and repaired in accordance with the approved Site Permit, Operational License, and this ordinance. Where a standard or requirement is not provided by either this ordinance, the WEF Site Permit or the WEF Operational License, the WEF and Licensee shall comply with manufacturer's recommended maintenance practices.
- (B) All components of a WT project shall conform to relevant and applicable local, state and national building codes.
- (C) A WEF may apply to the Planning Board for changes to a WEF Site Permit or Operational License. The application shall describe the requested change or changes. The Planning Board shall review the application and determine what provisions of this ordinance and Appendix "A" will apply to the application. The Planning Board will then process the application in accordance with all provisions of this ordinance deemed to be applicable. The provisions of Section VII, together with all other instances where this ordinance outlines financial obligations of the Applicant, Permittee, Owner/Operator and Licensee shall apply to any application for changes to a WEF Site Permit or Operational License. An application for changes will be required for any significant modification to the approved WEF Permit, including, but not limited to: any change in the number of WTs; any change in WT height, location, design, or specification; or any substantive change to any required plan or insurance coverage.
- (D) The WEF Permittee, Owner/Operator and/or Licensee, as applicable, shall notify the Emergency Management Director of any extraordinary event as soon as possible, and in no case more than twelve (12) hours after the event. "Extraordinary events" shall include but not be limited to tower collapse, catastrophic turbine failure, fires, leakage of hazardous materials, unauthorized entry to the tower base, thrown blade or hub, any injury to a WEF worker or other person that requires emergency medical treatment, or other event that impacts the health and safety of the Town or its residents.
- (E) Approval of a WEF Permit under this ordinance does not exempt an Applicant from obtaining other applicable permits from the Town, such as building, electrical, plumbing and shore-land zoning permits, Site Plan Review as applicable, or any applicable state or federal permit.

Section XI - Severability; Conflicts with Other Ordinances, Laws, and Regulations

- (A) If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by reason of any decision of any court of competent jurisdiction, such decision shall not affect the validity of any other section, subsection, sentence, clause or phrase or part thereof. The Town hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, phrase or part thereof even if any one or more sections, subsections, sentences, clauses, phrases or parts thereof may be declared invalid or unconstitutional.
- (B) Whenever a provision of this ordinance conflicts with or is inconsistent with another provision of this ordinance or of any other Town ordinance, or Federal or State of Maine rule, regulation or statute, the more restrictive provision shall apply.

Section XII - Ethical Standards

(A) Transparency, Public Participation and Highest Ethical Standards

All public deliberations and decisions regarding WEFs shall be conducted in an open, transparent manner that encourages the broadest public participation and adherence to the highest ethical standards.

(B) Public Access

All deliberations concerning WEF projects, whether in writing or conducted verbally, by the Planning Board, Board of Selectpersons, Board of Appeals, and any other subcommittees or working groups of the afore mentioned bodies shall fully comply with the letter and spirit of State law regarding Freedom of Access pursuant to Title 1; Chapter 13; Subchapter 1. Specifically, all deliberations regarding WEFs between members of the Planning Board, Board of Selectpersons, Board of Appeals and any subcommittees and working groups shall be conducted at public meetings for which notice has been duly given. Exceptions will be made only for: 1) appropriately recorded and executed executive sessions; and 2) communicating the minimal information necessary to set up and facilitate public meetings. Minutes of deliberations and decisions concerning WEFs will be maintained and filed in the Town's Municipal Offices. Copies of all correspondence and e-mails will be made available to the public with the exception of those publicly identified and disclosed as being subject to "attorney-client privilege" by the Town Attorney. All documents, correspondence and e-mails generated by consultants on behalf of the Planning Board, the Board of Selectpersons, Board of Appeals, their subcommittees and working groups shall be part of the public record.

(C) Conflicts of Interest

The process to develop and permit WEF projects shall be governed by a strict ethical code for conflicts of interest. No elected or appointed Town official or Town employee, their immediate family members, or their employees, who has a conflict of interest shall be directly or indirectly involved in the planning process or decision-making process for WEF projects. Conflicts of interest include, but are not limited to:

- (1) having right, title or interest in a Project Parcel;
- (2) having a financial arrangement with an individual or company, which derives income from the development of wind energy, including a signed Mitigation Waiver with financial remuneration;
- (3) serving as a paid representative of an individual or company, which derives income from the development of wind energy, or a written or verbal promise for future employment or contracts from a wind development company;
- (4) being directly or indirectly affiliated as an Applicant with a pending application for a WEF project;

Individuals with a conflict of interest must identify the conflict of interest and reclude themselves from all direct and indirect planning and decision-making regarding WEF projects, with the exception of voting and debating as a private citizen at any public meeting and public hearings.

Section XIII - Effective Date

This ordinance shall take effect immediately upon passage.

Section XIV – Appeals

Appeals shall be governed by provisions set forth in the Town's Site Plan Review Ordinance.

Appendix "A"

Pre- and Post-construction Sound Measurement Studies

(1) Information to be supplied by the Applicant

- a. The make and model of all WT units to be installed in the WEF.
- b. The burden is on the Applicant to provide sufficient information to establish that operation of the WEF will meet the requirements of this ordinance.

(2) Required Elements of the Study

- a. The purpose of the study is, first, to establish a consistent and scientifically sound procedure for evaluating existing background levels of audible and low-frequency sound; and, second, to determine whether the proposed WEF will meet the conditions set forth in Section V. The characteristics of the proposed WEF and the features of the surrounding environment will influence the design of the study. Site layout, types of WES/WTs selected and the existence of other significant local audible and low frequency sound sources and Sensitive Receptors should be taken into consideration.
- b. In determining the post-construction values, the Consultant should assume worst-case conditions for producing sound emissions. The assumed wind speed shall be the speed that results in the worst-case (i.e., highest) dBA and dBC sound levels in the area surrounding the WEF. The wind direction shall be taken to be the dominant wind direction in each season. If other wind directions may cause levels to exceed those of the predominant wind direction at Sensitive Receptors, then these levels and conditions shall be considered in the Study. To accommodate enforcement under weather conditions where this is a significant difference between the wind speed at ground-level and at hub- height, any predictive model shall assume that the winds at hub-height are sufficient for the highest sound emission, even though the enforcement tests will be with ground-level wind speeds of ten miles per hour or less.
- c. In the event that there are several pending Permit Applications, or pre-existing WEF(s), the estimated post-construction values shall be the combined predicted output of all proposed or existing WEF(s). All of these WEF(s) will be treated using the same methodology to arrive at combined value for the predicted post-construction sound level.
- d. Each additional WEF adds to the sound-burden of a community. If the contribution to sound levels of a proposed WEF, together with the sound generated by pre-existing WEF(s) would raise sound levels beyond the limits of this ordinance, then the proposed WEF will not be approved.

(3) At a minimum, the study shall include the following information, and meet the following requirements.

- a. The study shall address conditions in all four (4) seasons, and it is required that measurements be taken at each Measurement Point at least once in each of the four (4) seasons. The quietest period of each season should be chosen for measurement.
- b. The study may be based on computer models, but shall include a description of all assumptions made in the model's construction and algorithms. This description must be sufficient to allow an independent third party to verify the conclusions of the study. If the model does not consider the effects of wind direction, worst-case weather, operating conditions, geography of the terrain, and/or the effect of reinforcement from coherent sounds or tones from the turbines, then these shortcomings must be identified and other means used to adjust the model's output to account for these factors.
- c. The minimum and maximum distance between any Measurement Points.
- d. The distance between each Measurement Point and any significant local sound sources.
- e. All maps shall use of contour interval of no more than five (5) dB, and shall extend out, at a minimum, to distance sufficient to show the thirty (30) dBA or forty (40) dBC boundary, whichever is greater.
- f. Maps shall show the location of Measurement Points, sources of any significant local non-WEF sound or vibration, and the location of all Sensitive Receptors, including, but not limited to, schools, daycare centers, hospitals, residences, places of worship, and elderly care facilities.
- g. A map shall be included that shows the layout of the project area, including topography, the project boundary lines and property lines.
- h. Any additional information that the Consultant and Planning Board reasonably believe will aid in making a more informed decision as to whether the proposed WEF will meet the requirements of this ordinance.

(4)Wind turbine generator systems -Part 11: Acoustic noise measurement techniques

The purpose of this part of IEC 61400 is to provide a uniform methodology that will ensure consistency and accuracy in the measurement and analysis of acoustical emissions by WT generator systems. The standard has been prepared with the anticipation that it would be applied by:

- a. the WT manufacturer striving to meet well defined acoustic emission performance requirements and/or a possible declaration system;
- b. the WT purchaser in specifying such performance requirements;

- c. the WT operator who may be required to verify that stated, or required, acoustic performance specifications are met for new or refurbished units;
- d. the WT planner or regulator who must be able to accurately and fairly define acoustical emission characteristics of a wind turbine in response to environmental regulations or permit requirements for new or modified installations.

This standard provides guidance in the measurement, analysis and reporting of complex acoustic emissions from WT generator systems. The standard will benefit those parties involved in the manufacture, installation, planning and permitting, operation, utilization, and regulation of WTs. The measurement and analysis techniques recommended in this document should be applied by all parties to insure that continuing development and operation of WTs is carried out in an atmosphere of consistent and accurate communication relative to environmental concerns. This standard presents measurement and reporting procedures expected to provide accurate results that can be replicated by others.