



# TOWN OF SUMNER

INDUSTRIAL WIND ENERGY FACILITY ORDINANCE

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# **Town of Sumner Industrial Wind Energy Facility Ordinance**

## **Section I - Title**

This ordinance shall be known as the Town of Sumner Industrial Wind Energy Facility Ordinance.

## **Section II – Principle and Purpose**

The purpose of this ordinance is to protect the health, safety, and general welfare of the Citizens of Sumner by establishing reasonable and uniform regulations for the development of Industrial Wind Energy Facilities (IWEFs). This ordinance is to be liberally construed.

### **Licensing Authority**

The Planning Board shall be the licensing authority for IWEFs in the Town of Sumner, responsible for all IWEF related construction permits, temporary operational license and/or operational licenses.

### **Expert Consultants and Specialists**

The Planning Board may, with notice to the Applicant, hire expert Consultants or Specialists as deemed necessary to carry out the provisions of this ordinance including but not limited to: legal counsel, qualified independent acoustical experts, licensed Maine surveyors, licensed Maine engineers, biologists, zoologists, etc. All regulatory fees, costs, and expenses incurred by any such experts or specialists shall be paid by the applicant.

### **Extensions of Time Limits**

The Planning Board and the applicant may, by mutual written agreement, extend any time limits required in this ordinance, except where otherwise noted.

### **Documentation**

Applicant shall provide at least ten (10) hardcopies of all written and other materials required for submission to the Board, including any maps, photographs or drawings, with one electronic copy of all such materials in a digital format acceptable to the Board. Each hardcopy shall be bound.

## **Section III – Authority**

This ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, Section 1 of the Maine Constitution (Municipal Home Rule), the provisions of Title 30-A M.R.S.A. Section 3001 (Home Rule), and the provisions of the Planning and Land Use Regulation Act, Title 30-A M.R.S.A. Section 4312, et. seq. (Comprehensive Planning and Land Use Regulation, or “Growth Management Act”), as these laws may be amended from time to time, and consistent with the Town of Sumner’s Comprehensive Plan of 2006.

Whenever a provision of this ordinance conflicts with, or is inconsistent with, another provision of this ordinance or any other Town of Sumner ordinance, State of Maine or Federal statute or regulation, the more restrictive provision shall control.

## **Section IV – Applicability: Construction Permit and Operational License**

This ordinance applies to all IWEFs proposed to be constructed or operated on or after the effective date of the ordinance.

This ordinance includes Sections I through XV, together with the Appendix.

It shall be unlawful and a violation of this ordinance to begin construction, modification and/or operation of an IWEF in Sumner without appropriate permits and licenses required under local, state and federal law and regulations.

The burden of proof of compliance with all aspects of this ordinance is on the Applicant and/or the Owner/Operator of an IWEF.

## **Section V – Definitions**

**Acoustical Hazard** – annoyance, nuisance and/or potential threat of harm to the health of humans and animals living near IWEFs, with a resulting threat of a decline in nearby property values, all owing to noise, both audible and inaudible, produced by an IWEF.

**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. Ambient sound is not considered part of the long-term background sound.

**Amplitude Modulation** – unpredictable fluctuations in noise, both audible and inaudible, which often characterize sound emitted from IWTs and which may cause an acoustical hazard.

**ANSI**-American National Standards Institute.

**Applicant** –See definition of Owner/Operator.

**Application/Reports (A/R)** – a written request, which conforms to all of the requirements of this ordinance, by an Applicant or Owner/Operator, for a Construction Permit or to expand an IWEF or for an initial or renewed Operational License regarding an IWEF, or for any other matter for which the Applicant or Owner /Operator is seeking any kind of approval from the Town Planning Board.

**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.

**Background Sound (L90)** – refers to the sound level present at least 90% of the time. Background sounds are those heard during lulls in the ambient sound environment. That is, when transient sounds from flora, fauna, and wind are not present. Background sound levels vary during different times of the day and night. Because IWEFs are intended to operate continuously over a period of decades, the background sound levels of interest are those during the quieter periods which are often the evening and night. Sounds from the IWEF of interest, near-by birds and animals or people must be excluded from the background sound test data. Nearby electrical noise from streetlights, transformers and cycling air conditioning units and pumps etc. must also be excluded from the background sound test data.

Background sound level [dBA and dBC (as L90)] is the sound level present 90% of the time during a period of observation that is representative of the quiet time for the soundscape under evaluation and with duration of ten (10) continuous minutes. Several contiguous ten (10) minute tests may be performed in one hour to determine the statistical stability of the sound environment.

**Blade Passage Frequency (BPF)** – the frequency at which the blades of a turbine pass a particular point during each revolution (e.g. lowest point or highest point in rotation) in terms of events per second. A three bladed turbine rotating at 28 rpm would have a BPF of 1.4 Hz. [e.g. (3 blades times 28rpm)/60 seconds per minute= 1.4 Hz BPF]

**Blade Reflection** – the intermittent reflection of the sun off the surface of the blades of an IWT.

**CEO** – means Town of Sumner Code Enforcement Officer for matters relating to Industrial Wind Energy Facilities.

**Construction Permit** – final written permission to construct an IWEF.

**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.

**Days**- Refers to Calendar days.

**Debris Hazard** – Hazard owing to the possibility that the parts of an IWEF, or material (ice or other debris) accumulated on its rotating elements, could be dislodged and fall or be thrown some distance onto surrounding property.

**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.

**DEP Certification** – a certification issued by the Department of Environmental Protection pursuant to Title 35-A M.R.S.A. §3456, as may be amended from time to time, for an IWT that is subject to this ordinance.

**Emission** – Sound energy transmitted by an IWT to a receiver.

**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 those provisions.

**Extraordinary Events** – includes, but is not 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 an IWEF worker or other person that requires emergency medical treatment, or other event that impacts the health and safety of the Town or its residents.

**Frequency** – The number of oscillations or cycles per unit of time. Acoustical frequency is usually expressed in units of Hertz (Hz) where one Hz is equal to one cycle per second.

**Height** -means the total distance measured from the grade of the property as it existed prior to the construction of an IWEF, tower, turbine, or related facility at the base to its highest point. In the case of an IWT, this includes the length of the blade at its highest possible point.

**IEC** –International Electrotechnical Commission.

**Immission**– Noise received at a defined point after being transmitted from an IWT.

**Immission Spectra Imbalance**– The spectra are not in balance when the C-weighted sound level is more than 20 dB greater than the A-weighted sound level. For the purposes of this requirement, the A-weighted sound level is defined as the long-term background sound level (LA90) + 5 dBA.

**Industrial Wind Energy Facility (IWEF)** – means all of the following—any wind energy installation:

1. consisting of one or more IWTs with a combined tower and blade height of more than 150 feet (from ground to blade tip at its highest point); and
2. with a nameplate capacity of more than 100 kilowatts per IWT; and
3. requiring a Site Location of Development permit from the Maine Department of Environmental Protection pursuant to Title 35-A M.R.S.A §3456, as may be amended from time to time; and
4. the purpose of which facility is to generate electricity using ambient wind as a source of motive power in order to primarily supply electricity to off-site customers; and
5. includes, but is not limited to, any associated installations structures and facilities such as meteorological towers, substations and any other accessory structures, cables/wires, generator leads lines, fences, lighting systems, access roads, parking lots, turnout locations, temporary staging areas, together with maintenance and all power collection and transmission systems, and any areas in which the soil is in any way disturbed.

**Industrial Wind Turbine (IWT)** - an energy system that converts wind energy into electricity and which meets the height, nameplate capacity and other criteria cited in the definition of an IWEF above.

**Infrasound** – sound like waves having a frequency below the audible range, that is, below 20 hertz.

**Land Survey** – the practice of determining the boundaries, area, location and elevation of land, features and structures on the earth’s surface by means of measuring angles and distances, using the techniques of geometry and trigonometry, by a Maine Professional Land Surveyor (MPLS).

**LAeq** – means the energy-equivalent sound pressure level measured in decibels with a sound level meter set for A-weighting, “Fast” response over a measurement period; expressed as LAeq or Leq in dBA.

**LCeq** – means the energy-equivalent sound pressure level measured in decibels with a sound level meter set for C-weighting, “Fast” response over a measurement period; expressed as LCeq or Leq in dBC.

**Low Frequency Noise (LFN)** – refers to sounds with energy in the lower frequency range of 20 to 200 Hz.

**Ls**- margin of error shall be one (1) dBA unless otherwise authorized by the Town Planning Board, to account for variations in meter total instrument response.

**Lw** – manufacturer’s Guaranteed Maximum Sound Power level, in dBA re 1pW, under any operating conditions, including high winds, yawing, furling and power outages, whether electrically loaded or unloaded.

**L10**– the level of sound exceeded for no more than 10% of the monitoring period.

**Measurement Point** – refers to a location where sound and/or vibration are measured.

**Meteorological Tower (MET Tower)** – structure used for the measurement of wind force and speed and constructed as a tower to mount instruments at one or more heights above grade for the purpose of collecting wind or other meteorological data.

**Mitigation Waiver** – means a legally enforceable, written agreement between the Applicant and a Non- participating Landowner in the Town of Sumner for which the landowner waives certain protections afforded in this ordinance.

**Nameplate Capacity** – the electrical power rating of an individual IWT as certified by the manufacturer and the National Renewable Energy Laboratory and normally expressed in watts, kilowatts (kW), or megawatts (MW).

**Non-Participating Parcel** – a parcel of real estate that is neither a Project Parcel nor a Participating Parcel.

**Notice** – a written communication sent by certified mail "return receipt requested", or a major messenger service such as FedEx or UPS.

**Occupied Building** – any structure that is, or could, reasonably be occupied by persons or livestock. This includes, but is not limited to dwellings, places of business, places of worship, schools, and barns.

**Operational License (OL)** – License or renewal of a license issued by the Planning Board to operate an IWEF in accordance with this ordinance.

**Owner/Operator** - the person(s) or entity(s) with legal ownership or control of the property on which the IWEF is located or proposed to be located, including successors and assigns, that either had, has or is attempting to obtain, permission from the town of Sumner to build, operate on a daily basis, expand, decrease, change the use of, or decommission an IWEF. An Owner/Operator is the entity which has full legal authority to represent and bind itself to fulfill all of the provisions of this ordinance. This term is interchangeable with the “Applicant.”

**Parcel** -A contiguous quantity of land in the possession of an owner.

**Participating Parcel** - means a parcel of real estate that is not a Project Parcel, but is subject to a Mitigation Waiver.

**Planning Board** - For the purpose of this document, the Town of Sumner Planning Board shall herein after be

referred to as "Board".

**Professional Land Surveyor** - Professional Land Surveyor means a person licensed by the Department of Professional and Financial Regulation to perform any service or work involving the application of special knowledge for the purpose of determining property boundaries, determining area and volume, platting of land and subdivisions and other services as defined by law (reference 32 M.R.S.A. Section 13901 "Definitions").

**Project Parcel** – any property in which the developer has an ownership interest either whole or in part, including leases, easements or Rights-of-Way.

**Project Boundary** - means the boundaries of the IWEF as shown on the construction plan.

**Property Line** - means the legally recognized and mapped property boundary line.

**Public Way** - means any road capable of accommodating motor vehicles, including, but not limited to, any state highway, municipal road, county road, or other road dedicated to the public.

**Qualified Independent Acoustical Consultant** – refers to a person with qualifications under this ordinance for conducting baseline and other sound measurements, reviews and studies. Those qualifications include, at a minimum, demonstration of competence in the specialty of community sound testing and full and current 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.)

**Scenic or Special Resource** - means a scenic resource of state or national significance, as defined in Title 35-A M.R.S.A. Section 3451(9), as may be amended from time to time, any site registered in the National Registry of Historic Places, or a scenic or special resource of local significance identified as such in the Sumner Comprehensive Plan of 2006.

**Setback**- the minimal fixed distance required from the base of each IWT and the closest point on any property line of any non-participating property owner and/or public way as measured on a horizontal basis.

**Shadow Flicker**- alternating changes in light intensity caused by the movement of wind turbine blades casting shadows on the ground or a stationary object or occupied building.

**Significant Wildlife Habitat** - as defined under Maine's Natural Resources Protection Act (NRPA) and Administered by the Maine Department of Environmental Protection and Department of Inland Fisheries and Wildlife.

**Structure** - regarding IWEFs, the total constructed aspects and footprint of all of the physical attributes of the entire IWEF as defined in Title 38 M.R.S.A. § 482, as may be amended from time to time.

**Town of Sumner** - For the purpose of this document, the Town of Sumner shall herein after be referred to as "Town".

## **Section VI- Escrows**

1. The Applicant shall reimburse the Town for all regulatory costs and expenses incurred due to, for example, the evaluation, processing of applications and complaints. There shall be separate escrow amounts required for Met Towers, Construction Permits, Licensing and re-Licensing, and for decommissioning. At the end of each of distinct period, as determined by the Board, the funds in the Escrow Account will be returned to the Owner/Operator. All interest accruing to the escrow account shall be paid to the Applicant on a yearly basis, with a deduction for any money needed to replenish. The Board may require one continuous escrow account funded at different levels for the periods described above, or it may require that a separate escrow account be opened and closed for each of such periods.
2. To fund the costs of reviewing the application for the Construction Permit and decommissioning plan, the Applicant or Owner/Operator will open an Escrow Account at a financial institution approved by the Board, in

the name of the Town, to be managed by the Town Treasurer, depositing one-half of one percent (1/2 of 1%) of the estimated project costs coincident with the submission of an application for a Construction Permit and approval of decommissioning plan. Failure to provide notice and proof of deposit to the Town Escrow Account shall cause the application to be deemed withdrawn.

3. If the Construction Permit/Decommissioning Escrow Account falls below fifty (50) percent of the original required deposit amount, full replenishment is required within thirty (30) days of notice by the Town to the Applicant regarding the account deficiency. Failure by the applicant to provide to the Town notice and proof of deposit to the Town Escrow Account for such replenishment shall cause the application to be deemed withdrawn.
4. The Escrow funding level for the MET Tower and entire period of licensing and renewals of licensing shall be \$10,000 and shall be replenished within thirty (30) days as used.

## **Section VII – The IWEF Application Process**

### **Review Process**

The Steps of the IWEF application Process are:

- ❖ Pre-Application Meeting
- ❖ Preliminary Plan
- ❖ Meteorological Tower (MET)
- ❖ Construction Permit/Initial Operational Permit
- ❖ Operational License-Renewal, New Owner/Operator, Amended

### **Pre-Application Meeting with the Board**

1. Description and Purpose: This is an informal, informational, non-binding discussion with the Board so all parties fully understand what is being proposed and what is required by law.
2. Requirements: The applicant must attend the pre- application meeting and is expected to have read the Town's IWEF ordinance in advance. Any written materials the applicant wishes to provide to the Board shall conform to the A/R requirements of this ordinance.

### **Application Procedures and Requirements for Preliminary Plan**

1. Preliminary Plan Fee of \$1,000 (Non Refundable)
  - a. The Applicant shall be billed for all Planning Board costs associated with the evaluation of the Preliminary Plan.
2. Preliminary Plan Procedures: After meeting informally with the Board an applicant will submit a Preliminary Plan as detailed in the Preliminary Plan requirements below to the town clerk to be placed on the Board agenda within forty-five (45) days of receipt.

A dated receipt will be issued to the applicant and the applicant will be notified no less than ten (10) days prior to the Board meeting which includes the IWEF preliminary Plan on its agenda. The Board will review all Preliminary Plans received on a first come, first served basis.

Within forty-five (45) days from the date that the Board began the review process of the Preliminary Plan the applicant will be notified whether the Plan is complete. If incomplete, the Board will specify additional information or material(s) needed to complete the plan.

3. Preliminary Plan Requirements:
  - a. The Applicant, Owner/Operator and Construction Company's name, address and phone number.

- b. A narrative describing the proposed IWEF, including an overview of the project, the project location, the size and number of turbines, and the maximum generating capacity and expected megawatt production of each proposed IWT.
- c. Evidence of the Applicant's technical and financial ability to implement the projects proposed, including a history of the Applicant/Owner/Operator's previous wind facility projects or associations with such projects.
- d. An overview map that includes the extent of the entire Town, showing all roads, together with the location of all IWTs, access roads, power transmission lines, and any other features of the IWEF deemed to be relevant by the Planning Board.
- e. The names, addresses and available phone numbers of all owners of parcel(s) within one (1) mile of the project parcel.
- f. The distance between each IWT.
- g. A phased project plan, if phasing is sought.
- h. Written list of specific Community Benefits where applicable.
- i. Applicant shall submit a standard boundary survey of the subject property stamped by a Professional Land Surveyor licensed in the State of Maine. Survey shall also include existing land features including, but not limited to, existing roads, water courses, structures and utilities.
- j. 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 Owner/Operator, excepting financial information.
- k. Once the Preliminary Plan is complete and accepted by the Board, all landowners identified in subsection (e) will be notified in writing. The Board shall be responsible for the notification of landowners. The public shall have access to the Preliminary Plan in the town office during regular office hours. The public will have forty- five (45) days from the date of notification to provide written comments to the Board concerning the proposed IWEF.

**MET Tower Permit Submission Criteria**

A continuous MET study of no less than one (1) year and no more than two (2) years is a requirement. The removal of the MET must be completed within three (3) months of the test completion and the land restored to its previous condition.

The application for a MET permit for shall include the following information:

- 1. Application Fee of \$1,000 (Non Refundable)
- 2. Applicant and property owner name address and contact information.
- 3. Engineering drawings of
  - ❖ Proposed tower structure, instrument package, and guy system, if any
  - ❖ Proposed tower base
  - ❖ tower location showing property lines and setback requirements (as specified in this Ordinance)
- 4. A survey by a licensed Maine Professional Land Surveyor indicating tower location
- 5. Any building, use or construction permits required by other authorities

6. Period of data collection shall be at least one year but not more than two years. Decommissioning of the Met Tower shall be completed within 180 days of completion of data collection. Requirements for decommissioning of the entire IWEF shall also apply to MET Tower decommissioning.
7. Plans for mitigation of Environmental Hazards
8. Permit for the MET tower will expire eighteen (18) months after the date of issue. If the applicant has not commenced construction of the Met Tower within that period, the applicant must reapply.
9. A report of all data collected by the MET will be provided to the Board on a quarterly basis.
10. Decommissioning Plan
11. Failure to comply with the criteria of this ordinance relative to a MET application will result in the denial of the application.
12. Within 30 days of the Board's receiving a Meteorological Tower (MET) application the Board shall notify the Applicant in writing that the application is complete or, if the application is incomplete, shall inform the Applicant of the specific additional material needed to complete the application.
13. Within forty-five (45) days of the board having determined that the MET application is complete, the Board shall approve the application, approve the application with conditions or disapprove the application. The time limit for review may be extended by mutual agreement between the Board and the Applicant.
14. A post-construction inspection of the Met Tower shall be conducted by the Board's experts to ensure structural integrity and full compliance with this ordinance. If such inspection reveals issues of non-compliance, the CEO shall take appropriate enforcement measures.

### **Construction Permit Application Procedures and Requirements**

1. Construction Permit Procedures:
  - a. Construction Permit Application Fee \$5,000 (Non Refundable)
  - b. Applications for an IWEF construction permit shall be submitted to the Board at least forty-five (45) days prior to a Planning Board meeting. This submission must occur within six (6) months of acceptance of the Preliminary Plan as complete. The application for an IWEF Construction Permit shall include all of the information, documents, plans, escrow deposits and other items required to be submitted with an application under Section VIII, and a preliminary cost agreement with fees referred to in Section VI, together with all other instances where this ordinance outline financial obligations of the Applicant, Permittee, Owner/Operator and Licensee. The original plan shall be suitable for permanent recording in the Oxford County Registry of Deeds.
  - c. Within ninety (90) days of the Board receiving an application, the Board shall, with assistance from such staff, consultants, committees as it deems appropriate, notify the Applicant in writing either that the application is a complete application or, if the application is incomplete, that specific additional material is needed to make a complete application.
  - d. The Board shall hold a public hearing within forty-five (45) days of the date of determination of a complete application. The 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 Board shall send notice of the hearing to landowners

within the one (1) mile setback of the hearing. Public hearings by the Board shall be conducted according to the procedures outlined in 30-A M.R.S.A. Section 2691, Subsection 3 (A), (B), (C), (D), and (E), as may be amended from time to time.

- e. After the Board determines that an application is complete, the Board shall determine whether the application meets all requirements of this ordinance. In determining whether the application meets the requirements of this ordinance, the Board may obtain assistance from such staff and consultants, as it deems appropriate.
- f. Within ninety (90) days of the public hearing the Board shall approve the application, approve the application with conditions or disapprove the application. The time limit for review may be extended by mutual agreement between the Board and the Applicant.
- g. The Board shall make findings of fact and conclusions relative to the application's approval, approval with conditions or disapproval. The reasons for approval with conditions shall be clearly stated in the findings of fact conclusions. The findings of fact and conclusions shall be in the written record of the Board.
- h. An aggrieved party may appeal the decision of the Board on the application under this ordinance within thirty (30) days from the date of the decision to the Board of Appeals.
- i. Any significant modification of the approved IWEF such as, but not limited to, the number of IWTs, tower height, tower locations, turbine design and specifications shall require the Applicant to obtain an amended Construction Permit pursuant to this ordinance. The application procedures and permit requirements and standards for amending a Construction Permit are the same as for an initial application.

## 2. Construction Permit Requirements Including Engineering Drawings as Applicable:

- a. All requirements listed under the Preliminary Plan (Section VII)
- b. Proof of all liability insurance requirements (Section VIII)
- c. An overview map that includes the extent of the entire Town, showing all roads, together with the location of all IWTs, access roads, power transmission lines, and any other features of the IWEF deemed to be relevant by the Board.
- d. A tax map and lot number of all Project Parcels.
- e. 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.
- f. The boundaries of all Project Parcels, surveyed by a licensed Maine Professional Land Surveyor, with name, registration number and seal of the surveyor provided.
- g. The boundaries of all Participating Parcels.
- h. The boundaries of all Non-Participating Parcels located within one (1) mile of any proposed IWTs, together with the distance to, and bearing to, all boundary lines relative to each proposed IWT, as measured from the nearest point of the property line to the IWT. A licensed Maine Professional Land Surveyor shall provide this information.
- i. The names, addresses and available phone numbers of the owners of all Project Parcels, Participating Parcels, and Non-Participating Parcels located within one (1) mile of any proposed IWT, 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.
- j. Color photographs showing aerial perspectives of all project parcels, participating parcels, and all non-participating parcels within one (1) mile of any proposed IWT.

- 1. Color Photographs will also depict the preconstruction condition of the entire IWEF site.

2. Each color aerial photograph shall be accompanied by a duplicate onto which is superimposed an accurately scaled representation of the proposed IWEF to include any tree cover or vegetation to be removed.
- k. The location of all components of the IWEF, including but not limited to the IWTs, 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.
  - l. The location and description of all structures located on Project Parcels, and all occupied buildings located on Participating and Non- Participating Parcels located within one (1) mile of any proposed IWEF.
  - m. Dimensional representation and sizes of the structural components of each IWT tower construction including the base, footings, tower, and blades. Further, the total footprint of the proposed IWEF shall be expressed in acres.
  - n. The distance between each IWT tower and each of the following shall be shown on the construction plan: those structures listed in (M), above-ground utility lines, telephone lines, towers, and public ways located within one (1) mile of any proposed IWT.
  - o. Schematics of electrical systems associated with the proposed IWEF including all existing and proposed electrical connections.
  - p. Manufacturer's installation and operating instructions and remote control systems. Maximum generating capacity of each IWT, manufacturer's specifications to include design, make, model, sound power levels(Lw) for each 1/3 octave band from 6.3 Hz to 10,000 Hz, type of overspeed control, capabilities of automated brake systems and specifications of all other safety devices.
  - q. 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.
  - r. The location of any of the following found within one (1) mile of any proposed IWT: 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.
  - s. Pre-construction and post-construction field studies shall be conducted using the most advanced techniques available. If the pre-construction field studies demonstrate significant adverse effect to birds, bats, game animals or habitat fragmentation, the Board, the Owner/Operator and the Maine Department of Inland Fisheries and Wildlife (MDIFW) shall develop an appropriate mitigation plan. In determining the nature and effectiveness of such mitigation plans, the Board will be guided by its own consultants, the MDIFW, and applicable state laws and regulations. The Owner/Operator will be responsible for the full cost of implementing the mitigation plan under the supervision of MDIFW and the Board. After implementation, the Board will review the mitigation plan to determine its effectiveness. Should the Board find the mitigation efforts inadequate the Applicant/Owner/Operator will be given an additional one-hundred and eighty (180) days to resolve the deficiencies. In the absence of a successful resolution the Town shall have the right to pursue license revocation thru court proceedings.
  - t. 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.
  - u. 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.

- v. The size and scale of maps and diagrams shall be as determined by the Board, and shall include a north arrow, the date, the scale, and date and seal of a Maine Licensed Land Surveyor.
- w. The construction plan shall include such additional information as may be deemed required by the Board in light of the specific conditions of the property or surrounding areas, provided such information directly relates to the standards of approval for IWEFs set forth in this ordinance.
- x. A phased project plan that indicates how the IWEF will comply with the Construction Permit Standards and Requirements identified in Section VIII.
- y. The Board, CEO or other authorized representative of the Town shall be allowed access to the site during reasonable hours, after notice, for the purpose of evaluating the IWEF proposal. The CEO or other authorized representative shall be given access to the site during reasonable hours, after notice, to review the progress of work or to determine compliance with the conditions of any construction permit or other requirement of this ordinance.
- z. An Application for an IWEF Construction Permit shall include a road and property use and risk assessment plan containing the following information and meeting the following requirements.
  - 1. 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 IWEF, including a description of how and when such ways and property will be used or affected.
  - 2. 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.
  - 3. A complete assessment of the proposed use of public ways in the Town in connection with the construction of the IWEF, 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.
  - 4. A traffic control and safety plan relating to the use of public ways in the Town in connection with the construction of the IWEF
- aa. The applicant shall submit a design plan that meets the Design Standards set forth in Section VIII.
- bb. The application shall include a statement from the Federal Aviation Administration that the proposed IWEF 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 IWEF. In the absence of any such concerns, the Applicant must provide copies of correspondence with these bodies showing that no such concerns exist.
- cc. 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.
- dd. An application for an IWEF Construction Permit shall include a sign plan meeting the requirements set forth in Section VIII.
- ee. An application for an IWEF Construction 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 Board, using a testing protocol which is approved by the Board, shall perform the tests. A report of the tests shall be provided with the IWEF Construction Permit application and shall be provided to the owners of all property included in the study area. The

applicant shall seek written permission from property owners prior to conducting testing on such owners' property. The applicant shall not be required to perform testing on property where the owners have refused to grant permission to conduct the testing.

- ff. The Application shall include a security plan that contains the information and meets the requirements of Section VIII.
- gg. The application shall include a fire prevention and emergency response plan containing the information and meeting the requirements of this section. The plan shall describe the potential fire and emergency scenarios related to an IWEF 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 IWEF related 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. The study shall be conducted at the Applicant's expense and shall be certified by both the Chief of the Sumner Volunteer Fire Department and the Town's Emergency Management Director.
- hh. An application 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.
- ii. Any additional relevant information that the 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 IWEF.
- jj. IWEF Construction Permit applications will be accepted by the Board on a first-come first-serve basis.
- kk. If at any time it appears necessary or desirable to modify the approved plans before or during construction of the IWEF, the CEO is authorized to approve minor modifications due to unforeseen circumstances such as encountering hidden outcrops of bedrock, natural springs, etc. The CEO 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.
- ll. All construction activities must conform to the approved construction permit, including any conditions of approval and minor changes approved by the Inspecting Official and/or Board to address field conditions.
- mm. Upon completion of the project, the Applicant/Owner/Operator must provide the Board with a set of construction plans showing the structures as actually constructed. These "as-built" plans must be submitted within thirty (30) days of completion of the IWEF, and before commencement of operation of the IWEF.

## **Section VIII – Construction Permit Standards and Requirements/Initial Operational Permit**

### **Mitigation Waivers**

1. Owners of any non-participating parcel in Sumner may waive any of the setbacks, sound or shadow flicker restrictions in this section, except the Setback to Public Ways. This can only be accomplished with a written Mitigation Waiver, legally enforceable as a contract between the owner of the Non-Participating parcel and the applicant, and conforming to the requirements of this ordinance. The property subject to the Mitigation Waiver thereby becomes a Participating Parcel. No other provisions of this ordinance may be so waived.
2. Such mitigation waivers shall specify which provision(s) of setback, noise or shadow flicker are waived by the property owner shall provide a legal description of the property subject to the waiver and shall be recorded with the Oxford County Registry of Deeds. Any subsequent deeds shall advise all later owners that the property is so burdened.
3. The property owner shall provide a notarized, complete copy of such filing and recording to the Board within thirty (30) days of signing the waiver. Until the Board receives such a copy, the mitigation waiver shall

have no legal force under this ordinance. The applicant shall include, as part of the IWEF application, a complete list of all parcels subject to a Mitigation Waiver including the names and mailing addresses of the landowners.

### **Setback Requirements**

An IWEF shall comply with the following setback requirements, which shall apply in addition to the construction requirements found elsewhere in this ordinance. If more than one (1) setback requirement applies, the greater setback distance shall be met.

1. All parts of an IWEF shall comply with all applicable setback requirements in the Town's ordinances.
2. A Minimal Fixed Distance of one (1) mile (5,280 ft.) is required from the outer edge of the base of each IWT to the closest point on any property line of any non-participating property in Sumner.
3. This distance shall be measured horizontally between the outer edges of the base of each IWT within the IWEF and the closest point on any non- participating Property Line.
4. IWTs shall be spaced, within rows and between rows, a minimum of ten (10) rotor diameters apart, using the largest proposed or existing rotor diameter for the spacing calculation. This distance can be lengthened but not shortened, if deemed necessary by the Planning Board to prevent harmful turbulence, on the advice of an independent acoustical consultant of the Boards' choice.
5. Setback to Public Ways – All IWTs shall be set back from any public way in Sumner a distance of no less than one thousand seven hundred fifty feet (1,750 ft.), measured horizontally from the outer edge of the base of each IWT within the IWEF to any point on the center line of such public way, any above-ground electrical power lines or telephone lines that are not part of the proposed IWEF, except that a lesser setback from power or telephone lines shall be permitted if the utility agrees in writing and this agreement is approved by the Board.
6. Setback to Scenic or Special Resource Areas -- All IWTs shall be setback a minimum of three thousand feet (3,000 ft.) from any scenic or special resource, as indicated in the Town of Sumner's Comprehensive Plan of 2006.

### **Sound Restriction Requirements**

All acoustical instrumentation and sound measurement protocol conducted under the ordinance shall meet all the requirements of the following ANSI and IEC Standards cited in the Appendix.

#### **See Appendix (A)**

*\*\*See Appendix for details regarding scientific and technical terms concerning sound measurements\*\**

1. Audible Sound Restrictions
  - a. No IWEF shall be allowed to operate if, it exceeds (35) dBA day or night, anywhere in the Town, or the pre-construction L90A+5dB whichever is more restrictive. Background Sound Level L90 results are valid when L10 results are no more than 15 dBA above L90 for the same time period. Pre-construction background noise studies for audible noise shall be conducted by a qualified independent acoustical consultant selected by the Board for all properties any part of whose property lines are located within two (2) miles of an IWT. Such background noise studies shall also be conducted before a new Owner/operator's application is approved by the Board and every three years during the operational life of the IWEF, unless such a study has already been conducted during the previous twelve (12) months.
2. Low Frequency Sound Restrictions
  - a. Sumner baseline background noise levels (separate dBA numbers measured for day and night) plus fifteen (15) equals the maximum dBC levels allowed, but never exceeding 50 dBC anywhere in the Town. If the day or night dBC levels are lower than 50 dBC, the most restrictive of these noise levels shall control.

- b. No IWEF or individual IWT shall be approved if pre-construction sound modeling and studies indicate, by a preponderance of the evidence, that to do so would cause any of the above noise restrictions to be exceeded.
  - c. Pre-construction background noise studies for infra and low frequency sound shall be conducted by a qualified independent acoustical consultant selected by the Board for all properties any part of whose property lines are located within two (2) miles of any IWT. Such background noise studies shall also be conducted before a new Owner/Operator's application for an operational license is approved by the Board and every three years during the operational life of the IWEF, unless such a study has already been conducted during the previous twelve (12) Months.
3. Post-Construction Sound Measurements/Testing
- a. The Owner/Operator shall continually collect sound level and MET data at several key locations on the turbines and around the perimeter of the IWEF as determined by the Board with consultation from an acoustical engineer of their choice. Such data collection, to continue throughout the full life time of the IWEF, will be transmitted in a form, frequency, format and distribution acceptable to the Board.
  - b. Summary reports of any and all exceedances or complaints, with explanations as to what they were, why they happened and what action occurred to correct the problem(s) must be sent to the Board on a monthly basis. All sound/Met data, in a format acceptable to the Board, must be sent to the Board quarterly and when requested for complaint resolution(s).
  - c. Sound measurement studies conducted by an independent acoustical consultant selected by the Board will determine sound levels immediately after construction of the IWEF, first with all IWTs operating and then with all IWTs shut down. Such tests will be repeated on multiple days and during different weather conditions until the consultant is satisfied that sufficient and representative data has been obtained. The results of these studies shall be compared with those conducted prior to construction of the IWEF and reported in writing to the Board for its consideration of noise compliance. These studies shall be conducted for each application for a Permit/Operational License.
  - d. The IWEF Applicant and/or Owner/Operator shall provide all technical information required by the Board or acoustical consultant before, during, and/or after any acoustical studies required by this document.

### **Risk Assessment for Road and Property Use**

1. If the Applicant requires the temporary closure of any public way, the Board may require the Applicant to enter into an agreement relating to the use of the public way.
2. 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 Board shall require the Applicant to provide a surety in an amount that the 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.

### **Design Safety Certification**

The design of each IWT shall conform to applicable industry standards, including those of the American National Standards Institute, (ANSI) and shall comply with standards promulgated by Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energies or other similar certifying organizations appropriate for the turbines' size and classification.

### **Design Requirements**

The design plan shall meet the following requirements:

1. The total height of any IWT shall not exceed four hundred-fifty (450) feet above grade, as measured to the blade tips at their maximum distance above grade.
2. IWTs 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. IWTs shall not be artificially lighted, except to the extent required by law, using only red lights. Strobe or other intermittent lights are prohibited unless required by law. The minimum number of IWTs will be illuminated, per FAA rules. Lighting shall be shielded from ground view to FAA maximum standards.
5. No advertising or display shall be permitted, other than identification of the manufacturer or operator of the IWTs or IWEF.
6. Electrical controls and control wiring and power-lines must be wireless or below ground, except where the IWEF's collector wiring is brought together for connection to the utility grid.
7. The clearance between the ground and the IWT blades shall be not less than twenty-five (25) feet.

### **Additional Protection Requirements**

The Applicant must demonstrate that the proposed IWEF will not have an undue adverse effect on the proposed sites geological stability, rare, threatened, or endangered wildlife, Significant Wildlife Habitat, Essential Wildlife Habitat, Raptor Habitat, threatened or endangered plants and rare and exemplary natural plant communities and ecosystems.

### **Blasting Plan Requirements**

Blasting shall be performed only after approval has been given to the Applicant for such operations and must comply with the following provisions set forth by Title 38, § 490-Z (14).

1. 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.
2. An IWEF Applicant shall not commence blasting without notifying the CEO and submitting a blasting plan that meets the latest Maine Department of Environmental Protection standards for quarry blasting, except as specifically modified by this section. The Applicant must execute this plan, and bears sole responsibility for all costs associated with its execution. The blasting plan shall be reviewed and approved by the CEO within ten (10) days of receipt before any blasting takes place.
3. 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 Board. Pre-blast surveys shall 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.
4. The Applicant shall notify 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.
5. 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.
6. 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.

### **Signal Interference Requirements**

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

### **Shadow Flicker**

1. IWEFs 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.
2. Property owners may waive the shadow flicker restrictions in this ordinance with a written mitigation waiver that conforms to the requirements of this ordinance. Such mitigation waivers must be recorded with the Oxford County Registry of Deeds. The property owner must provide a notarized copy of such recording to the Board within thirty (30) days of the of the recording date of the waiver. Until such a copy is provided the mitigation waiver shall have no legal force under this ordinance.

### **Sign Plan Requirements**

1. The plan shall provide signage at the IWEF, identifying the Project Parcels as being part of the IWEF 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 IWTs. 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.

### **Stray Voltage Assessment and Requirements**

1. Following construction of the IWEF 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 Board, using a testing protocol which is approved by the Board, shall perform the tests. A report of the tests shall be provided to the Board and to the owners of all property included in the study area. The Applicant shall seek written permission from property owners prior to conducting testing on private property. The Applicant shall not be required to perform testing on property where the owners have refused to grant permission to conduct the testing.
2. The Owner/Operator 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 IWEF.
3. The Owner/Operator shall be responsible for all costs incurred with the pre- and post-construction test.

### **Security Plan and Requirements**

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

1. A Wind Tower shall not be climbable up to fifteen (15) feet above-ground surface.
2. All ground-mounted electrical and control equipment and all access doors to a Wind Turbine shall be labeled and secured to prevent unauthorized access.
3. Clearly visible warning signs concerning voltage must be placed and maintained at the base of all pad-mounted transformers and substations. A warning sign must also be placed at the base of each turbine.
4. All motor vehicle access points to the Industrial Wind Facility from public roads shall be locked and gated.

### **Fire Prevention and Emergency Response Requirements**

Access to the IWEF 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.

### **Emergency Shutdown Plan Requirements**

1. An application for an IWEF Construction 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.
2. The IWEF Permittee, Owner/Operator and/or Licensee, as applicable, shall notify the Sumner Emergency Management Director and Sumner Fire Chief of any extraordinary event immediately and in no case more than twelve (12) hours after the event.

### **Re-commissioning & Decommissioning**

1. The Owner/Operator shall at its own expense either re-commission or decommission the IWEF at the end of its useful life. The "end of useful life" is defined as: thirty (30) days after the Owner/Operator decides to cease generating electricity or one-hundred eighty (180) days after the IWEF has stopped generating electricity for any reason. The Board may consider alternative timelines based on a written request from the Owner/Operator.
2. Decommissioning shall include removal of IWTs 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 IWT or IWEF's useful life, as determined in accordance within this ordinance, the Applicant provides written evidence of plans for continued beneficial use of these components of the IWEF, and this evidence is approved by the Planning Board.
3. Except as otherwise provided elsewhere within this ordinance, disturbed earth shall be graded and re-seeded, unless the Participating Landowner of the affected land requests otherwise in writing.

### **Failure to Perform**

If the Owner/Operator fails to complete the re-commissioning or decommissioning within established timelines the Town may use the Performance Bond to complete the work.

### **Inspections**

IWTs 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 Board. If such report recommends that repairs or maintenance be conducted, then the Owner/Operator and/or Licensee shall provide the 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 inspections by a Maine Licensed Professional Engineer will be required following an operational failure.

### **Liability Insurance**

The Applicant or Owner /Operator will maintain a current general liability (GL) policy for the IWEF in an amount commensurate to the potential liability of the IWEF. It will cover, but not be limited to, bodily injury, property damage or loss, or business interruption. The Town shall be listed as an "ADDITIONAL INSURED" on said policy. The insurance company must be approved by the Board and must have an A.M. Best insurance Rating of at least A to A-.

The costs of said policy shall be borne entirely by the Applicant or Owner/Operator who shall provide a "Certificate of Insurance" to the Board at least sixty (60) days prior to all renewals of the policy.

Notice shall be given to the Town by the policy provider in the case of cancellation or policy change no less than sixty (60) days before such cancellation or change.

### **Performance Bond**

1. The Applicant shall provide a Performance Bond for the life of the IWEF naming the Town as beneficiary prior to the issuance of the Construction Permit. The Performance Bond shall cover all costs associated with each stage of the IWEF lifecycle from evaluation to construction through commissioning, operations, re-commissioning and decommissioning. An independent licensed Professional Engineer, selected by the Board, will be retained to help the Board establish the amount of the Performance Bond for each stage of the IWEF's lifecycle, an amount to be established when the Construction Permit is issued and every other year thereafter.
2. The Board shall review the financial stability of the financial institution providing the Performance Bond initially and coincident with each valuation. The financial institution shall have a minimum AM Best rating of "A to A-"(excellent). Within thirty (30) days of receiving the valuation the Applicant or Owner/Operator must make any necessary adjustments to the Performance Bond. Failure to do so will cause the Construction Permit or Operating License to be rescinded.
3. In the event the Applicant or Owner/Operator is unable to secure a Performance Bond due to no underwriting entities existing, the Board may consider accepting a 100% funded Escrow Account as an alternative. The Escrow Account would be opened by the Applicant or Owner/Operator at a financial institution approved by the Board, in the name of the Town, to be managed by the Town Treasurer.

### **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.

### **Project Phasing Plan**

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

1. Construction plans and narrative that sets forth how the IWEF 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 an IWEF 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 by the CEO.
2. The 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 Construction Permit.

### **Public Inquiries and Complaints**

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 IWEF.
2. The Applicant or its designee shall within thirty (30) days 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 CEO upon request.

### **Community Benefits**

The applicant shall enter into a community benefit agreement with the Town under the terms of 35-A M.R.S.A. § 3454, as may be amended from time to time, including the payment of real and personal property taxes if the property is not otherwise exempt from taxation.

### **Initial Construction/Operational Permit**

1. Fee: \$5,000.00 (Non Refundable)
2. Performance Bond (Section VIII)
3. The initial Construction/Operational Permit allows for one (1) year of operation.
4. An inspection report certifying the structural and operational integrity of the IWEF is required. This report shall be signed by a Maine Licensed Professional Engineer chosen by the Board and the costs shall be borne by the Owner/Operator of the IWEF.

### **Section IX- Operational License(s)**

1. Fee \$5,000.00 (Non Refundable)
2. A renewal of the initial operational license and a new owner operational license(s) are effective for three (3) years. If not renewed they shall automatically lapse.
3. Applications shall be submitted to the Board at least ninety (90) days prior to the expiration date and shall include the following in accordance with the requirements of this ordinance.
  - a. Updated evidence of the new Owner/Operator's technical and financial ability to operate the IWEF in accordance with the requirements of this ordinance or to update evidence of the current Owner/Operator's financial ability.
  - b. Copies of any new agreements or any agreements that a new Owner/Operator has entered into involving any project parcel, not owned by the applicant, or any participating parcel.
  - c. Updated Security Plan.
  - d. Updated Fire Prevention and Emergency Response Plan.
  - e. Updated Emergency Shutdown Plan.
  - f. Updated Decommissioning Plan.
  - g. Updated General Liability Insurance Policy.
  - h. Updated sound/test studies in accordance with this ordinance.
4. An amended license automatically terminates an existing Permit/License and reverts back to the Construction Permit/License requirements.

### **Section X - Expiration of Construction Permit**

If an approved IWEF and/or phase of an IWEF are not substantially [at least fifty (50) percent or

more] completed within six months of the date of approval by the Board, then the Construction Permit shall expire, and the Applicant must reapply. The Planning Board may, for good cause shown, and proof of no harm to the Town, grant extensions of up to twelve (12) months for either start of construction or substantial completion of construction, provided such a written request is submitted prior to the lapse or expiration of the Construction Permit. The Board may grant more than one extension only if there is pending litigation challenging the approval of the IWEF.

## **Section XI – Complaints, Enforcement and Penalties**

### **Complaint Process**

All complaints shall be made in writing to the CEO, who shall provide copies to the Owner/Operator. Complaints involving IWEF sound, vibrations or other possible disturbances related to sound pressure require a written description of the event(s) to include date, time and subjective/objective intensity. Residents or landowners in Sumner may file such complaints.

1. After receipt of a complaint, the CEO shall, in an expeditious manner, and in the order complaints are received, contact the complainant and the Owner/Operator, visit the site of the alleged violation, conduct other investigation he deems appropriate, and, within a reasonable period of time, submit a written report to the Board of Selectmen. The CEO's report shall include his findings of fact and reasons for those findings with a recommendation to the Board of Selectmen as to the merits of the complaint.
2. If the Board of Selectmen and the CEO decide the complaint is without merit, it will be dismissed. If the Board of Selectmen and the CEO decide the complaint(s) has merit, involves sound, and has not been corrected within ten (10) days, the following will ensue:
  - a. Appropriate summary reports of all IWEF sound meter/MET data collected during the date(s) and time(s) of the complaint and for one (1) month prior and one (1) subsequent to the complaint will be requested from the IWEF.
  - b. Relevant monthly exceedance reports involving the IWEF will be reviewed.
  - c. All sound meter/MET data collected during the dates and times under inspection may be requested.
3. Findings of the summary reports and other data revealing evidence for a significant exceedance(s) related to sound pressure, as determined by the CEO, who may hire a qualified independent acoustical consultant of the Board's choice, will be:
  - a. Sent to the Owner/Operator with evidence of receipt sent to the Board of Selectmen
  - b. Sent to the complainant.
4. Significant sound pressure exceedances constitute a violation of this ordinance. The Owner/Operator shall submit a response with an explanation and a mitigation plan within fifteen (15) days of receipt of the CEO's findings.
5. Failure to respond to the CEO within one (1) month and to delineate and implement a correction acceptable to the CEO and the Board of Selectmen will initiate one of the following protective orders which shall remain in effect until the Board determines it would not disturb or harm the public health, safety or welfare to alter or terminate them:
  - a. Limitation of the time, speed, manner, and/or circumstances, in which the entire IWEF or one (1) or more IWTs may operate.
  - b. Shutdown of the entire IWEF or one (1) or more of the IWTs.
  - c. Imposition of other conditions the Board considers necessary.

6. If a complaint related to sound pressure should continue after appropriate corrections have been made by the Owner/Operator, and which have been agreed upon by the Board of Selectmen with expert advice, the CEO shall visit the site for further information. If the continuing complaint is found to have merit, the CEO will continue the investigation and a qualified independent acoustical consultant will be hired by the Board to begin appropriate sound level measurements as deemed reasonable and in accordance with the requirements of this ordinance.
7. If the complaint is deemed to have merit, but concerns issues other than sound, the CEO shall hire appropriate, independent, qualified experts to address the matter and conduct any needed tests or investigations. The general procedure for resolving sound issues will likewise apply.

### **Emergencies**

1. The Owner/Operator shall shut down the IWEF in the event of any emergency or extraordinary event. This shutdown shall continue in effect until the CEO determines that it is safe to resume operations and the CEO approves the resumption of IWEF operations, either in part or in full.
2. The Owner/Operator shall immediately report to the Sumner Emergency Management (EMA) Director, Town Fire Chief and the Oxford County Regional EMA Director and the Maine State Police/Oxford County Sheriff, all extraordinary and/or emergency events. The Owner/Operator shall respond to any signal interference by the IWEF with Town, Oxford County or other Emergency Communications within twenty-four (24) hours, and eliminate such interference within forty-eight (48) hours.

### **Enforcement**

1. It shall be the duty of the Code Enforcement Officer or other person (appointed by the Board of Selectmen) charged with enforcement of municipal laws to enforce the provisions of this ordinance.
2. In addition to the provisions set forth above, if the CEO finds that provisions of this ordinance are being violated, he or she shall notify personally or in writing, if necessary by certified mail return receipt requested, the person responsible for such violation indicating the nature of the violation, and ordering the action necessary to correct it. In addition to penalties provided herein, the Town may bring an action in the Superior Court or District Court to enjoin violators of this ordinance, for collection of penalties, for injunctive relief, and for such other relief as may be provided by law.

### **Penalties**

Any person, including, but not limited to an Owner/Operator, an Owner/Operator's agent, or contractor who orders or conducts any activity in violation of this ordinance shall be penalized in accordance with 30-A M.R.S.A. § 4452, as may be amended from time to time. For the purposes of enforcement, a separate offense shall be deemed to be committed on each day during which a violation occurs or continues to occur. Such non-compliance shall include failure by the violator to eliminate, by the end of a reasonable period of time established by the CEO or the Board of Selectmen, the causes of any complaints found by the Board to have merit.

### **Records of Complaints**

The Town shall maintain a permanent record of all complaints, CEO investigations, reports by consultants and outcomes. The Owner/Operator shall designate a representative and method to receive complaints by telephone call, email and other digital communications via the internet and to make an initial response to non-emergency complaints within a reasonable time throughout the Operational Life of the IWEF.

## **Section XII - Miscellaneous Requirements**

### **Maintenance**

An IWEF shall be constructed, operated, maintained, and repaired in accordance with the approved Construction Permit and other provisions of this ordinance. Where a standard or requirement is not provided by either this ordinance or the IWEF Construction Permit the IWEF and Owner/Operator shall comply with

manufacturer's recommended maintenance practices.

All components of an IWEF project shall conform to applicable local, state and national building codes.

### **Other Permits Required**

Approval of an IWEF 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 XIII – Effective Date and Amendment**

This ordinance shall take effect immediately upon passage by a majority of those voting at a Town meeting.

Amendment Process- This ordinance may be amended by a majority vote of the annual or special town meeting. Amendments may be initiated by a majority vote of the Planning Board or by request of the Board of Selectmen to the Planning Board or on a written petition meeting the requirements of 30-A M.S.R.A §2522, as may be amended from time to time. The Board shall conduct a public hearing on any proposed amendment.

### **Section XIV – Appeals**

The Board of Appeals shall have the power to hear and decide appeals, on an appellate basis, where it is alleged by an aggrieved party that there is an error in any order, requirement, decision, or determination made by, or failure to act by, the Planning Board. The governing law shall be the "Board of Appeals Bylaws for the Town of Sumner" adopted January 1st, 1990 including any subsequent amendments in effect at the time of the appeal.

### **Section XV – Incorporation of Appendix**

The following Appendix is hereby incorporated by reference into the main body of this ordinance as binding requirements.

## APPENDIX "A"

### Sound and Noise Measurement Standards

1. The following technical requirements will ensure that critical sound measurements are conducted in an accurate and scientific manner. The American National Standards Institute (ANSI) and the International Electrotechnical Commission (IEC) cooperate in setting standards for many technical issues, including sound measurement protocols.
2. All sound and noise measurements and reporting of same, required by this ordinance, whether conducted by the applicant or by the Town, shall be carried out in strict compliance with the specific ANSI and IEC technical standards as listed, and in some cases, dated and modified, below. The following specific ANSI and IEC standards, with any noted modifications, are adopted by reference as part of this ordinance.
3. Specific options provided for in ANSI S12.9 Part 3 (1993, Revised 2008) shall be followed along with any additional requirements included below:

5.2 Background Sound: Use definition (1): long term

5.2 long term background sound: The L90 excludes short term background sounds

5.3 basic measurement period: Ten (10) minutes L90

5.6 Sound Measuring Instrument: Type 1 Precision meeting ANSI S1.43 or IEC 61672"1. The sound level meter shall cover the frequency range from 6.3 Hz to 20k Hz and simultaneously measure dBA LN and dBC LN. The instrument must also be capable of accurately measuring low level background sounds down to 20 dBA.

6.5 Windscreen: Required

6.6(a) an anemometer accurate to  $\pm 10\%$  at 2m/s to full scale accuracy. The anemometer shall be located 1.5 to 2 meters (m.) above the ground and orientated to record maximum wind velocity. The maximum wind velocity, wind direction, temperature and humidity shall be recorded for each ten (10) minute sound measurement period observed within 5 m. of the measuring microphone.

7.1 Long term background sound

7.2 Data collection Methods: Second method with observed samples to avoid contamination by short term sounds (purpose: to avoid loss of statistical data)

8. Source(s) Data Collection: All requirements in ANSI S12.18 Method #2, Precision to the extent possible while still permitting testing of the conditions that lead to complaints. The meteorological requirements in ANSI S12.18 may not be applicable for some complaint tests.

For sound measurements in response to a complaint, the compliance sound measurements should be made under conditions that replicate the conditions that caused the complaint without exceeding instrument and windscreen limits and tolerances.

8.1(b) Measuring microphone with windscreen shall be located 1.2m to 1.8m (1.5 preferred) above the ground and greater than 8 m. from large sound reflecting surface.

8.3(a) All meteorological observations required at both (not either) microphone and nearest 10 m. weather reporting station.

8.3(b) for a ten (10) minute background sound measurement to be valid the wind velocity shall be less than 2m/s (4.5 mph) measured less than 5m/s. from the microphone. Compliance sound measurements shall be taken when winds are less than 4m/s at the microphone.

8.3(c) In addition to the required acoustic calibration checks, the sound measuring instrument internal noise floor, including microphone, must also be checked at the end of each series of ten minute measurements and no less frequently than once per day. Insert the microphone into the acoustic calibrator with the calibrator signal off. Record the observed dBA and dBC reading on the sound level meter to determine an approximation of the instrument self- noise. Perform this test before leaving the background measurement location. The calibrator covered microphone must demonstrate that the results of this test are at least five (5) dB below the immediately previous ten (10) minute acoustic test results, for the acoustic background data to be valid. This test is necessary to detect undesired increase in the microphone and sound level meter internal self-noise. As a precaution sound measuring instrumentation should be removed from any air conditioned space at least one (1) hour before use. Nighttime measurements are often performed very near the meteorological dew point. Minor moisture

condensation inside a microphone or sound level meter can increase the instrument self-noise and void the measured background data.

8.4 The remaining sections, starting at 8.4 in ANSI S12.9 Part 3 Standard do not apply.

4. All procedures and standards shall be followed in ANSI S12.18 -- (1994 reaffirmed: 2009) Procedures for Outdoor Measurement of Sound Pressure Level.
5. All of the Standardized acoustical instrumentation and sound measurement protocols conducted under this ordinance shall meet all the requirements of the following ANSI Standards in their most recent, updated, official ANSI version:
  - a. ANSI S1.43 Integrating Averaging Sound Level Meters: Type-1 (or IEC 61672-1)
  - b. ANSI S1.11 Specification for Octave and One-third Octave-Band Filters (or IEC 61260)
  - c. ANSI S1.40 Verification Procedures for Sound Calibrators