

TOWN OF SHARON, NEW HAMPSHIRE

SITE PLAN REVIEW REGULATIONS GOVERNNG LARGE WIND ENERGY SYSTEMS

SECTION I: AUTHORITY

This Regulation is adopted pursuant to the enabling provisions of NH RSA 674:1, V, NH RSA 672:16, NH RSA 674:17(j) and NH RSA 162-H. In addition, pursuant to the provisions of NH RSA 674:43, it provides for the promoting the Health, Safety and General Welfare of the community by empowering the Planning Board to regulate and restrict the location of structures within the Town of Sharon.

SECTION II: PURPOSE

The purpose of this Regulation is to provide for the development and use of wind power as an alternative energy source, benefiting both the economy and the environment, while protecting public health, safety, property values, wildlife, and the general welfare by establishing a regulatory framework for the construction, operation and decommissioning of Large Wind Energy Systems (LWES) in the Town of Sharon, subject to reasonable restrictions that will:

1. Preserve and protect the public health, safety, welfare and the character of the Town;
2. Allow renewable energy in a manner consistent with the vision and goals of the Town of Sharon Master Plan and Open Space Report;
3. Minimize the visual impact of a LWES;
4. Protect individual residents and the Natural Environment from any adverse conditions caused by the LWES and from any potential injury or damage from hazards associated with failure of LWES components and/or Debris Hazards;
5. Ensure the financial security necessary for the construction, operation, decommissioning, and removal of these systems;
6. Ensure the compatibility of any LWES with other land uses within the Town; and
7. Protect property values.

SECTION III: DEFINITIONS

Abutter: as defined in Sharon's Zoning and Building Ordinance Article XVII, Definitions.

Adverse Noise Impacts: - Disturbances that interfere with: normal speech and communications both indoors and outdoors, talking, telephone conversations, reading, tasks requiring concentration, listening to music or television, and sleep.

Ambient Noise: - See Background Noise.

Applicant/Owner/Operator: - The person, firm, corporation, company, or other entity who applies for approval under this Article, as well as the applicant's successor(s), assign(s) and/or transferee(s) as to any approved LWES or testing facility. An applicant must have the legal authority to represent and bind the landowner or lessee who will construct, own, and operate the LWES or testing facility. The duties and obligations regarding approval for any approved LWES or testing facility shall be with the owner of the LWES or testing facility, and jointly and severally with the owner and operator or lessee of the LWES or testing facility. For the purposes of this Article, the terms Applicant, Owner and Operator will be used interchangeably, and will refer to the Applicant/Owner/Operator as defined above.

Application: - An application for the construction of a Large Wind Energy System (LWES), or for permission to operate a LWES under these regulations.

Automatic Obstruction Lighting System: - A lighting system that provides continuous 360⁰ (degree) surveillance of the airspace around a wind farm from the ground level to above aircraft flight altitudes, automatically activating obstruction lighting when aircraft are detected at a defined outer perimeter and course of travel.

A-weighted (dBA): - The unit of measure for the human response to noise, using an electronic filter as specified

by ANSI approximating the frequency response of the human ear from 20 Hz to 20 kHz.

Background Noise: - The noise level represented without the wind turbines operating and when man-made and natural intrusive sounds are at a minimum, also called Ambient Noise. The intent of this definition is to exclude noise level contributions from intermittent noises such as traffic and emergency vehicles, and from seasonal natural sounds such as tree frogs and crickets that are not present year-round.

Blade Glint: - The intermittent reflection of the sun off the surface of the blades of a single or multiple Wind Turbines.

CNR (Community Noise Response): - United States Environmental Protection Agency methodology to predict the community noise reaction to a new sound source introduced into the environment.

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

Excessive Noise: - Any noise that causes a nuisance or disturbance or degrades health or well-being.

FAA: - The Federal Aviation Administration.

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

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

Hertz (Hz): - A unit of frequency equal to one cycle per second.

Hub Height: - The distance to the center of the turbine hub as measured from ground level to the center of the Wind Turbine hub.

Impact(s): - Any effect on the environment, including sound and visual impacts such as changes in sound pressure, noise, and light in the environment.

Infrasound: - Sound energy below 20 Hz.

Large Wind Energy System (LWES): - An electricity generating facility, with a generating capacity of over 100 kilowatts and less than 30 megawatts, consisting of one or more Wind Turbines, and including any substations, Met towers, cables/wires and other buildings accessory to such facility.

Ldn: - The day/night level is the twenty-four (24) hour average of continuous "A-weighted" sound energy having a 10 decibel penalty added to the nighttime hours of 10 p.m. to 7 a.m.

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

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

Met Tower: - A meteorological tower used for the measurement of wind speed.

Natural Environment: - Includes navigable waters, waters of a contiguous zone, ocean waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States, including wildlife, ecosystems and habitat, historical, cultural, recreational and archeological resources.

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

Noise: - Unwanted or any sound that is not part of the natural environment.

Noise Emitter: - Any man-made piece of LWES equipment that is audible beyond the property line of a Participating Landowner.

Noise Level: - Energy-equivalent sound pressure level (Leq) over a minimum of a ten-minute interval.

Non-Participating Landowner: - All landowners, not including those on whose property all or a portion of a Large Wind Energy System is located pursuant to an agreement with the Applicant.

Octave Band: - A band of sound covering a range of frequencies such that the highest is twice the lowest, as defined in ANSI Standard S1.11.

One-Third Octave Band: - A band of sound covering a range of frequencies such that the highest frequency is the cube root of two times the lowest, as defined in ANSI Standard S1.11.

Participating Landowner: - Any landowner on whose property all or a portion of a Large Wind Energy System is located pursuant to an agreement with the Applicant.

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

Setback: The distance a LWES tower base is set back from abutting property lines, structures or other features.

Shadow Flicker: - The effect when the blades of an operating wind turbine pass between the sun and an observer, casting a readily observable, moving shadow on the observer and his/her immediate environment.

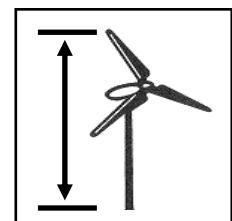
SODAR: - (Sonic Detection and Ranging) A meteorological instrument used to measure the wind speed profile at various heights above the ground, and the atmospheric thermodynamic (lower layer) structure.

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

Sound Power Level: - L_w . Ten times the logarithm to the base ten of the ratio of the sound power radiated by the source to a reference sound power, expressed in decibels (dB). The reference sound power is 1 picowatt (pW).

Sound Pressure Level: - L_p . Twenty times the logarithm to the base ten of the ratio of a given sound pressure to a reference sound pressure of 20 microPascals (uPa), expressed in decibels (dB).

Total Height: - When referring to a Wind Turbine, the distance measured from ground level to the blade extended at its highest point.



Tower Shadowing: - The outline created on the surrounding area by the sun shining on a Wind Turbine.

Un-weighted (dBL): - A sound pressure level obtained without a weighting filter.

Useful Life: - The LWES or/or individual Wind Turbine(s) will be presumed to be at the end of useful life if no electricity is generated for a continuous period of twelve (12) months.

Visual Clutter: - The accumulation of diverse built elements on a site, especially elements that contrast with their surroundings in form, color, texture, or pattern.

Welfare: - A state of well-being.

Well-being: - A good or satisfactory condition of existence; a state characterized by health, happiness, and prosperity.

Wind Shear: - The difference in atmospheric wind speed and direction occurring over relatively small increases

in altitude (wind gradient).

Wind Turbine: - A wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator, including the turbine, blade, tower, base and pad transformer, if any.

SECTION IV: LARGE WIND ENERGY SYSTEM REQUIREMENTS

The Town of Sharon can best be described as a small New England rural town, but unlike most there is no obvious town center, with citizens' residences encircling a thousand acre town forest, and each residence separated from its neighbor sitting on a five acre lot. The Applicant has the burden of proof to establish that the LWES will not unduly impact this pattern of living, and complies with the goals as found in the Sharon Master Plan, updated December 2002, or as amended. These requirements are intended:

- To preserve the essentially rural character in a growing and urbanizing world;
- Protect streams, rivers and wetlands;
- To keep the costs of future growth within the limits of Sharon's resident-based tax base;
- To protect the majority of necessary public services through contracts with other towns and the public sector;
- To protect the health, safety and welfare of Sharon's citizens;
- To avoid or minimize natural hazards such as landslides and flooding;
- To recognize and protect environmentally sensitive lands and waters;
- To establish and maintain an open space system comprised of the Town's environmentally sensitive areas, which are linked by trails and corridors to provide wildlife and pedestrian passage throughout the town;
- To preserve large tracts of open woodland;
- To protect forested hillsides;
- And to preserve the rural character of all roads in Sharon.

The Board, in determining compliance with these requirements, will be guided by the applicable recommendations in the document "Proposed Wind Power Siting Guidelines - May 29, 2007" which was developed by the Wind Energy Facility Siting Guidelines Working Group and forwarded to the NH Energy Policy Committee Wind Siting Subcommittee.

A. Design, Manufacture, Construction, and Maintenance Standards

1. In order to minimize Visual Clutter, Wind Turbines shall use tubular towers of similar design, size, operation and appearance throughout the project and shall be painted a non-reflective, non-obtrusive color.
2. At the LWES site, the design of the buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend with the natural setting and the existing environment.
3. Wind Turbines shall not be used for displaying any signs or advertising except for signs at ground level for reasonable identification of the manufacturer, owner or operator of the LWES, the utility procuring the power, emergency contact information, and appropriate warnings as required by national, state, and local laws. Such identification shall not be illuminated.
4. Control wiring and transmission/power lines shall be wireless or below ground except where collector wiring is brought together for connection to the transmission or distribution network, adjacent to that network. The Board may permit above ground wiring if, in the opinion of the Board, its Impact is less than the Impact of below ground wiring.
5. The Applicant of an LWES shall not undertake any blasting without specific approval of such blasting during Site Plan Review. Terms and conditions for the blasting, including any necessary notifications, shall be specified during Site Plan Review. If necessary, the Applicant may return to the Board with a written request for additional blasting, subject to additional notifications at the Applicant's expense, as specified by the Board.
 - a. The Applicant shall prepare an inventory of all structures, wells, bridges, and other seismically sensitive structures that could potentially be damaged by blasting.
 - b. Before each blasting event, the Applicant shall notify all Non-Participating Landowners and any owners of a seismically sensitive structure, of the time and date of the event. The Applicant shall

- receive signature verification of such notice.
- c. Flyrock traveling in the air or along the ground is not permitted to cross into the property of Non-Participating Landowner(s).
 - d. A blasting log for each blast will be kept on-site at the LWES office for not less than five (5) years, and copies of the required blasting log will be promptly submitted to the Board of Selectmen upon completion of construction of the LWES.
 - e. Pre-blasting and post-blasting inspection and documentation may be required by the Board.
6. If at any time during construction, operation, or maintenance of the LWES, the Applicant wishes to modify the approved Site Plan, the Applicant shall submit to the Board an Amended Site Plan for review and approval.
 7. Construction and maintenance activities shall be organized and timed to minimize Impacts on residents and wildlife from noise, disruption (including disruption of wildlife habitat), and the presence of vehicles and people. Construction and maintenance, unless there is an imminent threat to life or property, shall be performed only on weekdays (other than legal holidays, as recognized by the state or federal governments) within daylight hours, as defined by the FAA. The Planning Board and/or the Board of Selectmen have the authority to waive this requirement if, in its opinion, there is good reason to do so.
 8. Any construction equipment or parts (used or unused) kept on site shall be stored indoors except during periods of construction, maintenance, and repair.

B. Height.

1. The total height of the Wind Turbines shall not exceed four hundred and fifty feet (450 ft).
2. Met towers must be less than two hundred feet (200 ft) in height and must be designed so as not to require lighting in compliance with FAA regulations. Guy wires are allowed on Met Towers, but must be designed so as to limit environmental hazards to wildlife, especially birds and bats.
3. Due consideration shall be given to the scale of the turbines in relation to the surrounding landscape.

- C. Setbacks.** Setbacks from the Project Boundary shall be at least one and one-half times (1½) the Total Height of the Wind Turbine from the nearest property line, sufficient to protect people, domestic and farm animals, public and private property, and utilities from Debris Hazard. The ice throw or ice shedding from the LWES shall not cross the Project Boundary. The Applicant has the burden of proof to demonstrate to the Board that the setback is sufficient to meet these standards.

The Applicant shall submit a graph of the required Setback for each hazard as a circle for a single tower or as a series of connected arcs for multiple towers centered on each turbine and submitted with the required Setback graphically superimposed to scale on town maps identifying lot owners, structures and lot property lines.

- D. Communications Interference.** All LWES shall be sited and operated so that they do not interfere with television, telephone (including cellular and digital), microwave, satellite (dish), navigational, or radio reception to neighboring areas. The Applicant shall provide certification from a NH Licensed Professional Engineer confirming that the proposed project does not interfere with television, telephone (including cellular and digital), microwave, satellite (dish), navigational, or radio reception to neighboring areas. The Applicant of the facility shall be responsible for the full cost of any remediation necessary to provide equivalent alternate service or correct any problems; including relocation or removal of the facility, caused or exacerbated by the operation of such equipment and any and all related transmission lines, transformers, and other components related thereto. The Applicant of the LWES shall respond within five (5) business days to any request for a communications interference investigation by a property owner within the Project Boundary and a three-mile radius beyond the Project Boundary. Testing shall commence within ten (10) working days of the request. The Applicant is responsible for mitigating within ten (10) working days from determination of interference cause attributed to the operation of the LWES.
- E. Noise Level Limits and Measurement.** The intent of this section is to preserve the quiet rural environment of Sharon and to provide protection from Excessive Noise levels that cause adverse Impacts to public Health, Welfare, and Well-being. The existing Background Noise levels in Sharon are less than 30 dBA. Annoyance due to Noise, as measured by community surveys, is the consequence of activity interference. Noise Level limits are based on the recommended guidelines found in the United States Environmental Protection Agency's document *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With An Adequate Margin of Safety, 550/9-74-004, March 1974* and include levels requisite to protect

against activity interference. These Noise Level Limits are consistent with the World Health Organization (WHO) night noise guidelines for exposure to noise during sleep found in the following documents: *Night Noise Guidelines (NNLG) For Europe, 2007* and *ISBN 978 92 890 4173 7, 2009*.

1. Noise Levels produced by the LWES shall not exceed 33 dBA (Leq 10 minute) anywhere at any time on a Non-Participating Landowner’s property.
2. LWES Noise levels shall not exceed a Community Noise Response (CNR) of “sporadic complaints” as shown on the following table based on the United States Environmental Protection Agency Document titled “*Information on Levels of Environmental Noise Requisite To Protect Public Health And Welfare With An Adequate Margin of Safety, 550/9-74-004, March 1974.*”

Community Noise Response (CNR)	Leq
Vigorous Action	50 - 58
Appeals to Stop the Noise	44 - 49
Widespread Complaints	34 - 43
Sporadic Complaints	30 - 33
No Reaction	24 - 29

Chart based on EPA Case Studies normalized to Leq in rural areas

[Leq (-6dB), quiet rural community (-10 dB), no prior exposure to intruding noise (-5dB), pure tone or impulsive noise character (-5 dB)]

3. The Board may impose greater noise constraints if it deems such constraints are necessary to protect the public health, safety, and welfare of the community.
4. Any model used to predict Wind Turbine Noise shall use the following parameters:
 - a. Each Wind Turbine shall be considered as an individual and unique noise emitter;
 - b. The prediction model shall use the Manufacturer’s highest sound power levels, as measured using standard IEC 61400-11 (edition 2.1, dated November 2006), which shall be submitted in 1/3 octave band for frequencies 31.5 to 8000 Hz. Test reports performed for the same model(s) proposed for the LWES shall be submitted in full.
 - c.. The prediction model shall use a wind shear (wind profile power law exponent, alpha) of no less than 0.50, where wind shear is defined as the difference in atmospheric wind speed and direction occurring over relatively small increases in altitude;
 - d. No attenuation (zero) for ground cover since a Wind Turbine is an elevated noise emitter;
 - e. No attenuation (zero) for foliage since trees have no leaves from November to April;
 - f. Add a plus 5 dB design margin to the predicted Noise Levels to account for variations in atmospheric propagation due to refraction (the bending of sound waves in the atmosphere due to changes in air temperature or wind gradient).
 - g. Ground absorption values used in the modeling software shall be set to zero (0) for water and hard concrete or asphalt surfaces and zero point five (0.5) for all other surfaces.
5. Noise measurements shall be taken with the Wind Turbines turned on and turned off to determine any Background Noise to be accounted for. The Applicant shall cooperate by shutting Wind Turbines off and turning them on during acoustic testing at times required for the acoustic-monitoring personnel.
6. The wind velocity at the sound measurement microphone shall not exceed 2 m/s (4.5 mph) during measurements of Background Sound Pressure Level, and the maximum wind speed at the microphone for noise measurements during Wind Turbine operation shall not exceed 4 m/s (9 mph).

F. **Shadow Flicker, Tower Shadowing and Blade Glint.** The facility shall be designed such that Shadow Flicker, Tower Shadowing, or Blade Glint will not fall on or in any Non-Participating Landowner’s property.

1. Shadow Flicker, Tower Shadowing, or Blade Glint expected to fall on a roadway or a portion of a Non-Participating Landowner’s property may be acceptable under the following circumstances:
 - a. The Shadow Flicker, Tower Shadowing, or Blade Glint will not exceed twenty (20) hours per year.
 - b. The Shadow Flicker, Tower Shadowing, or Blade Glint will fall more than 100 feet from an existing residence.
 - c. The traffic volumes are less than 500 vehicles per day on the roadway.

- d. **The Shadow Flicker or Blade Glint shall not fall onto an intersection.**
2. **Within twelve (12) months of the date when the project becomes fully operational, or at anytime upon receipt of a verified complaint of Shadow Flicker, Tower Shadowing, and/or Blade Glint, the Applicant shall submit to the Board of Selectmen a Shadow Flicker, Tower Shadowing, or Blade Glint study as specified in the Submission Requirements of the Sharon Site Plan Regulations, certifying that Shadow Flicker, Tower Shadowing, or Blade Glint present no deleterious effects for any occupied structure located within a one-mile radius of any Wind Turbine. If Shadow Flicker, Tower Shadowing, and/or Blade Glint exceeds any of the conditions listed above, the source Wind Turbine(s) shall be shut down until the flicker or glint problem is remedied.**
- G. Public infrastructure. The Applicant shall avoid, mitigate and repair any and all adverse impacts to any public infrastructure (e.g., road or highway, drainage system, etc.) occasioned by or in any manner related to the installation, operation, maintenance, and repair or decommissioning of the LWES. This includes reimbursement to the Town or State for any repairs or reconstruction reasonably deemed necessary by the Town or State.**
- H. Erosion and Storm Water Control. During the Useful Life of the LWES, the Applicant shall maintain any and all erosion and storm water control practices described in the Erosion and Storm Water Control Plans and Life Cycle and Decommissioning Plans submitted with the Application for Site Plan Review.**
- I. Safety.**
1. **Each Wind turbine shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. All turbines shall be equipped with redundant braking systems. This includes both aerodynamic (including variable pitch) over speed controls, and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode, whereby they are engaged in the case of loss of load on the generator. Stall regulation should not be considered a sufficient braking system for over speed protection. A manual electrical and/or overspeed shutdown disconnect switch shall be provided and clearly labeled on/in the Wind Turbine structure.**
 2. **The blade tip of any Wind Turbine shall, at its lowest point, have ground clearance of not less than seventy-five (75) feet.**
 3. **Any Wind Turbine and/or accessory structure shall not be climbable up to fifteen (15) feet above ground level.**
 4. **The LWES shall be designed to prevent unauthorized access to electrical and mechanical components and shall have access doors that are kept securely locked at all times when service personnel are not present.**
 5. **Appropriate warning and safety signage shall be placed on any Wind Turbine, accessory structure and/or electrical equipment, and posted at all LWES entrances.**
 6. **All structures shall be self-supporting. No guy wire supported structures shall be permitted with the exception of Met (meteorological) towers.**
 7. **A sign shall be posted near all towers or the operations and maintenance office building that will contain emergency contact information.**
 8. **Signage placed at the road access shall be used to warn visitors about the potential danger of falling ice and the Debris Hazards.**
 9. **Any Wind Turbine that is found to present an imminent physical threat of danger to life or significant threat of damage to property shall be immediately shut down and repaired or otherwise made safe and certified so by a New Hampshire licensed Professional Engineer prior to resumption of operation.**
- J. Rescue, Fire and Hazard Protection. The Applicant shall assure that the LWES complies with the following fire control and prevention measures.**
1. **A plan acceptable to the Fire Chief and/or State Fire Marshall for fire-fighting and rescue services, including water accessibility, any necessary equipment, and/or training for local fire protection and rescue personnel, shall be prepared and updated annually. The full cost of implementing and maintaining the plan, including equipment, equipment maintenance, and staffing, shall be the responsibility of the Applicant.**
 2. **Compliance with all laws applicable to the generation, storage, clean up, transportation and disposal of hazardous wastes generated during any phase of the project's life.**

- K. **Environmental Impact.** The Wapack Range, situated along the eastern edge of Sharon, is the centerpiece of a crucial migration route that is recognized by the Federal government. The Wapack Range, approximately twenty-two (22) miles long, is part of a unique geological formation known as a “leading line,” which creates a long, reliable updraft that birds intentionally travel to, to assist in their migration. There is no other “leading line” formation for hundreds of miles – effectively, there is not another one in New England. Well-documented records indicate that more than five thousand (5,000) migrating raptors have been known to travel through this precise corridor in the course of a single day. More than thirteen thousand (13,000) migrating raptors are counted each fall migration season. To comply with the goals and objectives outlined in the Sharon Master Plan, the Board will exercise particular care in protecting this critical flyway and the natural environment which supports it.

The Applicant shall take appropriate measures to minimize, eliminate, or mitigate adverse Impacts on the Natural Environment during the entire life cycle of the LWES and shall comply with all Federal, State, and local laws regulating environmental Impacts. In making its determination under this section, the Board shall consider the U.S. Fish and Wildlife Service “*Wind Turbine Guidelines Advisory Committee Recommendations*,” dated March 4, 2010, or subsequent updates, the “*Proposed Wind Power Siting Guidelines - May 29, 2007*” (which was developed by the Wind Energy Facility Siting Guidelines Working Group and forwarded to the NH Energy Policy Committee Wind Siting Subcommittee), and any recommendations of the New Hampshire Fish and Game Department and the Sharon Conservation Commission.

1. **Environmentally Sensitive Areas.** The plan for the LWES shall reflect the natural capabilities of the site to support development. Environmentally sensitive areas, including but not limited to, wetlands, vernal pools, seeps or springs, steep slopes (greater than 15%), watersheds, floodplains, significant wildlife habitats, fisheries, habitat for rare or endangered plants and animals, unique natural communities and natural areas, and sand and gravel aquifers will be maintained and preserved to the maximum extent. The Applicant shall demonstrate appropriate measures for protecting these resources during the entire life cycle of the project.
2. **Wildlife.** The Applicant shall demonstrate that the LWES will not have a significant adverse Impact on area wildlife and wildlife habitat. Such analysis shall include but not be limited to adverse Impacts on game animals, and habitat fragmentation. In addition, the Applicant must demonstrate that the LWES will have no undue adverse Impact on rare, threatened or endangered wildlife. The wildlife and habitat analysis must include pre-construction field studies conducted by a qualified wildlife biologist approved by the Planning Board and paid for by the Applicant.
3. **Birds and Bats.** Development and operation of a LWES shall not have an adverse Impact on bird or bat species.
 - a. All above-ground lines, transformers, or conductors should comply with the Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) published standards to prevent avian mortality.
 - b. The design and installation of the LWES shall avoid, to the extent practicable, the creation of artificial habitat for raptors or raptor prey, such as: electrical equipment boxes on or near the ground that can provide shelter and warmth; horizontal perching opportunities on the towers or related structures; and soil where weeds can accumulate.
 - c. In order to minimize the detrimental Impacts on bat and bird populations, all Wind Turbines shall be configured and or controlled so that the blades will not turn when wind velocity at hub height is less than 10 mph. Additionally, there may be periods of time when the Wind Turbine operations must be curtailed to protect bats and migratory birds.
4. **Ground and Surface Water.** The LWES will not adversely affect the quality or quantity of ground and surface waters. The Applicant shall demonstrate to the Board’s satisfaction that there are no unusual risks caused by the LWES. The Board may require that spill prevention and control measures be installed, and that all activities involving potentially permeable pollutants, including at delivery and transfer points, be conducted under cover and over an impervious surface surrounded by dikes. Whenever sedimentation is caused by stripping vegetation or grading, it shall be the responsibility of the Applicant to remove it from all adjoining surfaces, drainage systems and watercourses and to repair any damage at the Applicant’s expense as quickly as possible.

5. **Historical, Cultural, Archeological.** Because the preservation of historic resources is very important to the Town of Sharon as stated in the Master Plan, the Applicant shall be required to:
- Inventory and map all historically significant sites located with two thousand (2000) feet of the proposed LWES project area, including stone walls, structures, roadways, and cellar holes.
 - Provide a plan outlining how the Applicant proposes to minimize the impact of construction and ongoing operation of the LWES on these sites.
- As a condition of approving the Applicant's Historical, Cultural, Archeological protection plan, the Board may require specific setback for LWES structure or roadways from significant sites and/or other actions that protect or restore items of historic significance.

L. **Visual Impact.**

- A LWES shall be designed and located so as not to cause adverse visual Impacts, including Visual Clutter and Impacts caused by any lighting, and so as not to dominate views from neighboring residential areas, cultural resource areas, public recreational and scenic areas, trails used by the public, open space within the Town, or any public road right-of-way.
- Dominance is determined by how a LWES will be seen within its visual context and occurs when the project would cause a change in the balance or feel of the character of the surrounding area or create a very dominant focal point that detracts from other important natural or cultural focal points. (The Board may use as a reference document *A Visual Impact Assessment Process for Wind Energy Projects*, Vissering, Sinclair, and Margolis, May 2011.) Some of the factors to be considered in evaluating the degree of dominance are:
 - appearance of proximity;
 - duration of view;
 - expectation for natural or intact landscape setting;
 - uniqueness of a scenic resource;
 - whether the view is directly ahead over extended distances; and
 - whether large numbers of turbines are visible in many views.
- All available mitigation techniques to reduce the visual Impacts of the LWES shall be considered, including methods prescribed by the American Landscape Institute.
- The use of Automatic Obstruction Lighting Systems (AOLS), such as those manufactured by DeTect and OCAS, is mandatory for Wind Turbines with FAA lighting. The Applicant will provide a report approved by the FAA detailing the impact of the AOLS on local flight activities and upon Victor Airways present in the area.
- Area and security lighting shall be full cut-off and shall not exceed 175 watts each and 25 feet in height and shall be shielded from Non-Participating Landowner's property.
- Photographical simulations shall be provided from potential sensitive public and private viewpoints. The Board may request that particular viewpoints be illustrated such as the area near and around the Town Meeting House and Sharon Arts Center, and scenic sections of the Town or State roads.

- M. **Additional Conditions.** The Board may grant a LWES Site Plan approval subject to any condition that it deems necessary to minimize any burden on any person affected by granting the approval. Such conditions or exemptions may include but are not limited to restrictions on the location of the LWES and requirements for the compensation of persons affected by granting approval.

SECTION V: APPLICATION FOR PERMIT TO CONSTRUCT

A. **General Procedure:**

Whenever any site plan is proposed and before any preconstruction site work (except that which is necessary to perform required on-site tests), construction, land clearing is begun, before any permit for the erection of any structure in such proposed project shall be granted, before any plat may be filed in the Hillsborough County Registry of Deeds, the owner thereof or his authorized agent, shall apply for, and secure from the Planning Board written recommendations submitted to the Sharon Board of Selectmen, in accordance with the procedures and specifications contained in these regulations.

B. Preliminary Consultation and Review:

1. The applicant may submit a Preliminary Layout to the Secretary of the Planning Board not less than twenty (20) days before any regular meeting of the Planning Board. This optional step may aid both the applicant and the Planning Board in reviewing the proposal. The preliminary layout shall include:
 - a. List of all abutters and their addresses,
 - b. Check to cover mailing and advertising costs.
2. Such preliminary consultation shall be informal and directed toward:
 - a. Reviewing the basic concepts of the proposal,
 - b. Reviewing the proposal with regard to the Town Master Plan and applicable ordinances or regulations, including the Town's subdivision regulations, and
 - c. Guiding the applicant relative to necessary State and Local requirements.
3. Preliminary consultation and review shall not bind the applicant or the Planning Board.
4. There will be public notice and a mailing to all abutters so that the public may aware of the scope and size of the proposed project.
4. Preliminary consultation and review shall be separate and apart from formal consideration of an Application for Permit to Construct, and the time limits for acting shall not apply until a formal Acceptance of an Application is made in accordance to Article V of the Sharon Planning Board Rules of Procedure.
5. While minutes of the Planning Board will reflect the discussion during the Preliminary Consultation, comments and suggestions of the Planning Board and/or public shall not be binding to conditions of final approval.

C. Acceptance of Application for Permit to Construct:

1. The applicant shall submit an Application for Site Plan Review to Construct a Large Wind Energy System to the Secretary of the Planning Board not less than twenty (20) days before any regular meeting of the Planning Board.
2. The Planning Board shall review the materials submitted to determine if the Application is complete. i.e. that all required materials have been submitted in the form specified. If the Application is incomplete, the applicant will be directed to supply the missing items and resubmit the application at a later date, that date being at least twenty (20) days prior to a regularly scheduled meeting.
3. If the Application is found to be complete, a public hearing shall be held for discussion of the Application. A notice to all abutters at least ten (10) days in advance of said hearing shall be sent by registered mail, return receipt requested, and shall specify the grounds for the hearing as well as the date, time, and place. At least a ten (10) day advance notice of the time and place of such hearing shall be published in a paper of general circulation in the Town and a legal notice shall also be posted at two (2) public places in Town.
4. Prior to the date of the Public Hearing, the Applicant will provide an Escrow Account or other financial instrument satisfactory to the Board of Selectmen, established and maintained in accordance to Section XIII below.

D. Completed Application:

Application for Site Plan Review shall be submitted to and processed by the Planning Board in the same manner as all Public Hearings, as detailed in Articles V, VI, VII and VIII of the Sharon Planning Board Rules of Procedure. A completed application shall consist of all the following items unless a written request for waiver(s) is received and granted by the Board.

1. A completed application form, accompanied by:
 - a. Names and addresses of all abutters as defined in Sharon's Zoning and Building Ordinance, Article IV, I. Definitions.
 - b. A letter of authorization from the owner, if the applicant is not the owner;
 - c. Names and addresses of all holders of conservation, preservation or agricultural preservation restrictions within or abutting the Project Boundary;
 - d. Payment to cover filing and notification fees; and
 - e. Six (6) paper copies of the plan.

2. General Information:

- a. Names & addresses of owner(s) of record; name & address of applicant, if different from owner; tax map and lot number(s) within the Project Boundary.
- b. Signature, license number, and/or seal of the preparer of the plan, and every engineer, architect, land surveyor, and soil scientist whose professional seal appears on the plan.
- c. Project name, description of project (including existing and proposed uses), the project location, the date the plan was prepared, each revision date with notation of what the revision was, north arrow and scale of the plan.
- d. Schedule of zoning requirements, such as lot area, frontage, setbacks, etc.

3. Submission Requirements: in addition to standard Planning Board requirements, as detailed above, applicants for a LWES shall submit the following:

- a. A demonstration satisfactory to the Planning Board that the Applicant has adequate financial, technical and managerial capability to assure construction, operation and decommissioning of the facility in continuing compliance with the terms and conditions of this regulation.
- b. Plans prepared and stamped by a NH licensed Professional Engineer that show the location, shape, size, color, materials, textures, landscaping, design, and total height of all proposed components of Met Towers and LWES, including the proposed access to the project site (including Town and State roads) and associated transmission lines.
- c. A location map to scale of current and planned land uses within the project boundary and a one-mile radius beyond the project boundary, showing the location of all proposed Wind Turbines and required set back for each, and that identifies Participating Landowners. These maps must be prepared by a NH licensed land surveyor.
- d. A site grading and clearing plan with a maximum of five-foot (5') contours that show all areas to be cleared and all grade changes. The plans shall include details on the collector lines, locations and heights of poles, clearing limits for above-ground lines, substations, transmission line details, and upgrades or changes to existing power lines. This plan shall delineate any environmentally sensitive areas.
- e. Historical, Cultural, Archeological Inventory and Resource Map prepared by NH licensed land surveyor, and Applicant's plan to minimize impact of LWES construction and operation on these sites.
- f. Environmental Resource Map prepare by a qualified NH licensed Land Surveyor of the project boundary and a one (1) mile radius beyond the project boundary.
- g. Intended period of data collection for the Met Tower.
- h. Certification of the non-reflecting properties of the external surfaces of the LWES.
- i. Calculations and supporting data for all setbacks for each turbine.
- j. List of property owners whose property wholly or partially fall within the setback areas.
- k. Studies and Reports as required by the Planning Board, including but not limited to those listed below. The cost of any required study, report, plan, mitigation effort, or any other work required to be done by the Planning Board, is the full responsibility of the applicant.
 - i. Sound Pressure Level Study
 - ii. Rescue, Fire and Hazard Protection Plan
 - iii. Road and Property Risk Assessment
 - iv. Wildlife and Bird Impact Study and Protection Plan
 - v. Groundwater and Surface Water Quality studies
 - vi. Visual Impact Assessment, including photographic simulations.
 - vii. Communication Interference Certificate
 - viii. Shadow Flicker, Tower Shadowing and Blade Glint study
 - ix. Safety Plan
- l. A Complaint Resolution Plan to address any complaints from affected parties during construction and over the life of the operation. The Plan shall identify a contact person and a process for mediation.
- m. A Decommissioning and Site Restoration Plan as outlined in Section XIII (Decommissioning)
- n. Storm Water Management Plan: both pre- and post-decommissioning
- o. Erosion Control Plan during construction, operation and decommissioning.
- p. Landscape Plan showing restoration of disturbed areas after completion of construction, including plans for maintaining landscaping during operation and during decommissioning.

- q. Estimate of decommissioning costs prepared by a NH licensed Professional Engineer, with sufficient detail to enable recalculations annually to track changing costs.
 - r. Blasting plan, including inventory of all potentially affected structures and sensitive areas.
 - s. Any other information deemed necessary by the Planning Board in order to make an informed decision.
5. **Regional Impact:**
An application for Large Wind Energy Systems is presumed to have regional impacts. Therefore, the procedure shall include notification as per NH RSA 36:54-57.

SECTION VI: STANDARDS FOR REVIEW

- A. In reviewing the proposed site plan, the Planning Board shall take into consideration the basic objectives of the Zoning and Building Ordinance and Site Plan Review Regulations of the Town of Sharon. Special note shall be taken of the District in which the proposed activity covered by the site plan is to take place, and the review of the site plan shall be in accord with the objective indicated by, and for that District.
- B. In reviewing the proposed site plan application the Planning Board will consider all the requirements of these regulations, determining that the Applicant has met the standards as indicated or has agreed to conditions to mitigate any unfulfilled requirements to the Planning Board's satisfaction.
- C. The Planning Board will provide a written statement within sixty-five (65) days of its decision, recommending a permit to construct, with or without conditions, or will provide written reasons for denial of a recommendation.
- D. The Planning Board will transmit to the Board of Selectmen its written recommendations to either approve the application for a Permit to Construct, with or without conditions, or to deny the Application.

SECTION VII: WAIVERS

The Planning Board may, at its discretion, waive certain standards contained in Sections IV.A, C and L where, in their opinion, the proposed application will have very limited impact on the site, its abutters, and the Town. The applicant must request any desired waivers in writing as part of the application. The written decision by the Planning Board shall state specifically what requirements are being waived and include reasonable alternative conditions or standards to be met.

SECTION VIII: APPROVAL TO CONSTRUCT

- A. Upon receipt of the recommendations of the Planning Board, the Board of Selectmen will review the recommendations and within sixty (60) days, will either:
 - 1. Confirm the recommendation of the Planning Board,
 - 2. Indicate that they would apply additional conditions to the Planning Boards recommendations.
 - 3. Deny the issuance of a Permit to Construct.
- B. The Selectmen will schedule of meeting within thirty (30) days with the Applicant, at which meeting the public will be entitled to attend and to testify.
- C. After consultation with the Applicant, the Board of Selectmen will grant a Permit to Construct, subject to conditions acceptable to the Board of Selectmen, and the Planning Board.

SECTION IX APPROVAL TO OPERATE

Following construction of an LWES, but before commencing operation, the Applicant shall apply to the Board of Selectmen for a Permit to Operate. This application shall include the following:

- 1. An Inspection Report prepared and signed by a NH Licensed Profession Engineer certifying the structural and operational integrity of the LWES, and completion of construction in accord with all

submitted and approved building, road, and other plans submitted to the Planning Board and/or Board of Selectmen, as required.

2. A signed statement that the Applicant and project site landowner(s) have read this entire regulation and any and all conditions placed by the Planning Board and/or Board of Selectmen prior to granting a Permit to Construct, and any and all modifications granted since that Permit was granted.
3. A Permit to Operate shall be valid for a maximum of thirty (30) years, unless a shorter time period is requested and approved by all parties. Application for renewal requires the presentation of a new application to the Planning Board, governed by the then-current ordinance and regulations.
4. Applications for a Permit to Operate or a Renewal Permit will be heard at the next regularly scheduled Planning Board or Board of Selectmen meeting for which adequate legal notice has been posted.
5. If a Permit to Operate is transferred to a new Owner or Operator, the new Owner or Operator is bound by all conditions, requirements and financial obligations of the original permit.
6. All conditions of approval shall be reviewed annually by the Planning Board or Board of Selectmen.
7. A Permit to Operate may be revoked and the operation cease if the Board of Selectmen determines that there is a violation of any provisions of this regulation or any other applicable ordinance or regulation. The Permit shall not be reinstated until the Board of Selectmen determines at a duly noticed public meeting that all violations have been corrected.

SECTION X: EASEMENTS AND LEASES

- A. Any Non-Participating Landowner may grant an easement to the Applicant for any Impacts of the LWES on their property.
- B. The full terms of any leases or easements shall be recorded with the Registry of Deeds.
- C. Wind rights shall not be sold or leased in perpetuity separately from the land.

SECTION XI: MONITORING

Upon reasonable notice, Sharon officials or their designated representatives may enter a lot on which a LWES has been approved for the purpose of monitoring noise, impacts on the Natural Environment, and other impacts which may arise. In such a case, the Board will provide the Applicant with a 24-hour telephone notice, followed by e-mail notification for the record.

- A. **Post-construction Water Quality Study:**
 1. Within six (6) months of the first Wind Turbine becoming operational, and every twelve (12) months thereafter for a period of three (3) years, a water quality study of all wells, springs, and water resources specifically identified during the Site Plan Review shall be designed and carried out by a water quality professional approved by the Board of Selectmen. The same procedures shall be followed as those followed in the pre-construction notification and testing procedures specified in the Site Plan Review Regulations.
 2. Upon receipt of a substantiated complaint that the integrity or water quality of any well has been damaged by the LWES construction, the Board of Selectmen may require prompt investigation of the complaint by a water quality professional approved by the Board of Selectmen.
 3. If degradation or contamination of any well, spring, or water resource is found to have occurred, the Applicant shall be considered in violation of this Article and subject to the provisions of the Enforcement Section of this Article.
 4. The Applicant is responsible for all costs associated with water quality testing and corrective action if necessary.
- B. **Annual Power Production Report:** Applicant shall submit an annual power production report to the Board of Selectmen. The power production report shall cover the preceding twelve (12) months, and shall be in the form prescribed by the Board of Selectmen and shall include actual power production in kilowatt-hours for each Wind Turbine.

C. Environmental Impact Studies:

1. The Applicant/ shall submit to the Board of Selectmen at least three (3) sets of post construction field studies conducted at periodic intervals within three (3) years after the LWES becomes fully operational, the first being within six (6) to twelve (12) months of the first Wind Turbine becoming operational. The studies shall be conducted by a qualified wildlife biologist approved by the Board and paid for by the Applicant and shall correspond to the pre-construction studies.
2. If the post-construction field studies demonstrate substantive harm to the Natural Environment, the Applicant shall develop an appropriate mitigation plan acceptable to the Board of Selectmen. The Applicant shall be responsible for the full cost of implementing the mitigation plan.
3. In addition, the Applicant shall submit a quarterly report to the Board identifying all dead birds and bats found within 500 feet of the LWES. Reporting shall continue for at least three (3) years after the first Wind Turbine becomes operational, or longer if required by the Board of Selectmen. In the event of an extraordinary avian or bat mortality kill of threatened or endangered species, or discovery of an unexpected large number of dead birds or bats of any variety on site, the Applicant shall notify the Board and the New Hampshire Department of Fish and Game within 24 hours. Within 30 days of the occurrence, the Applicant shall submit a report to the Board of Selectmen describing the cause of the occurrence and the steps taken to avoid future occurrences.

D. Decommissioning Costs. Estimated total costs of decommissioning, prepared at the Applicant's expense by an independent New Hampshire licensed Professional Engineer approved by the Board of Selectmen shall be submitted to the Board every fifth year of operation.

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

1. Except as specifically noted otherwise, sound measurements shall be conducted in compliance with the latest version of the American National Standards Institute (ANSI) Standard S12.18-1994 "Outdoor Measurements of Sound Pressure."
2. Sound level meters and calibration equipment shall comply with the latest version of ANSI Standard S1.4 "Specifications for General Purpose Sound Level Meters," and shall have current calibration traceable to the National Institute of Standards and Testing (NIST).
3. Noise measurements shall be taken at locations and times when the wind turbine is clearly audible and dominating the acoustical environment. All unattended measurements shall consider the wind turbine as dominating the acoustical environment.
4. Noise measurements shall be taken with the turbines on and off to determine any Background Noise to be accounted for. The Applicant shall cooperate by shutting turbines off and turning them on during acoustic testing at times required by the acoustic monitoring personnel.
5. The acoustic monitoring personnel shall determine if extraneous sounds such as insects, frogs or other sounds are contributing to the measured Leq noise level and remove their contributions either by relocating the measurement microphone to a spot not affected by such sounds or conducting testing at dates and times when such sounds are not present. The acoustic monitoring personnel may correct the Leq noise level using full or 1/3 octave band analysis to subtract Turbine Off levels from Turbine On levels, and by removing data in 1/3 octave bands from the Leq computation that are contaminated by extraneous sounds.
6. The wind velocity at the sound measurement microphone shall not exceed 2 m/s (4.5 mph) during measurements of Background Noise, and the maximum wind speed at the microphone for noise measurements during turbine operation should not exceed 4 m/s (9 mph).
7. During Wind Turbine testing the atmospheric profile shall be Pasquill Stability Class E or F preferred, Class D as alternate. Wind Turbine acoustic testing shall be conducted with wind speeds at Hub Height at 8 m/s or greater.
8. The Wind Turbine shall be fully engaged blades-to-generator and running the standard power output program and producing the maximum power output for the incoming wind speed at Hub Height. Feathering or other blade angle manipulations that are not part of the normal Wind Turbine program to obtain maximum power output shall be prohibited during acoustic testing unless the Wind Turbine must be feathered due to a high wind condition for safety purposes, in which case the testing shall be

rescheduled.

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

SECTION XII: PUBLIC INQUIRIES AND COMPLAINTS

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

- A. Any individual, group of individuals or reasonably identifiable entity may file a signed and dated written complaint with the Applicant of the LWES. If any complaints are received by phone, the Applicant shall inform the complainant that complaints must be submitted in writing. Any complaints received directly by the Board of Selectmen or the Planning Board shall be referred to the Applicant.
- B. The Applicant of the LWES shall report to the Board of Selectmen all complaints received concerning any aspect of the LWES construction, operation, or decommissioning as follows:
 1. Complaints received by the Applicant shall be reported to the Board of Selectmen or its designee within five (5) business days, except that complaints regarding unsafe or serious violations of this Regulation as defined in Section XIV shall be reported to the Board of Selectmen or its designee on the following business day.
 2. The Applicant shall document each complaint by maintaining a record including at least the following information:
 - Name of the LWES and the Applicant/Owner/Operator
 - Name of complainant, address, phone number
 - A copy of the written complaint
 - Specific property description (if applicable) affected by complaint
 - Nature of complaint (including weather conditions if germane)
 - Name of person receiving complaint, date received
 - Date reported to the Board of Selectmen or its designee
 - Initial response, final resolution, and date of resolution
 3. The Applicant shall maintain a chronological log of complaints received, summarizing the above information. A copy of this log, and a summary of the log by type of complaint, shall be sent on or before January 15, March 15, July 15, and October 15 to the Board, covering the previous calendar quarter. An annual summary shall accompany the January 15 submission.
 4. The Board of Selectmen shall forward copies of any health-related complaints to the State Board of Health.
 5. All complaints regarding unsafe and serious violations as defined in Section XIV of this Regulation shall be investigated on site. The complainant and a Board of Selectmen designee shall be invited to any investigatory meeting(s).
 6. The Board of Selectmen may designate a person to seek a complaint resolution that is acceptable to the complainant, the Board of Selectmen and the Applicant. If such a resolution cannot be obtained, the Board of Selectmen may take action as authorized by the enforcement section of this Article.
 7. The Board of Selectmen may at any time determine that a complaint shall be subject to enforcement and penalties as defined in Section XI of this article.

SECTION XIII: ADMINISTRATION AND ASSOCIATED COSTS

- A. Violations found by the Board upon examination of required reports, or from other sources, shall be forwarded to the Board of Selectmen for enforcement action. This does not foreclose any legitimate legal action by the Board.
- B. At the time of acceptance of their Application for Site Plan Review (Section V.C.1) the Applicant shall deposit into an escrow account the amount of \$25,000.

1. **The purpose of this joint escrow account is:**
 - a. **To reimburse the Town of Sharon for the costs incurred to hire consultants and experts as the Town, at its sole discretion, deems desirable to examine, evaluate, and verify the data and statements presented by the Applicant;**
 - b. **For the life of each Wind Turbine, to cover the administrative and legal costs incurred by the Town of Sharon in monitoring and enforcing the Applicant's ongoing compliance with this Article.**
2. **The escrow account shall be managed as follows:**
 - a. **Funds may be withdrawn from this account only by the Board of Selectmen.**
 - b. **If at any time the balance of this account shall fall below \$15,000, the Applicant shall deposit an amount sufficient to bring the account to a minimum value of \$25,000.**
 - c. **If at any time the balance of this fund shall fall below \$15,000 for a continuous period of thirty (30) days, the application shall be considered to have been withdrawn, or the Site Plan approval for the LWES may be revoked.**
 - d. **The Board of Selectmen or its designee shall be charged with monitoring the escrow account and giving quarterly reports to the Board.**
 - e. **After the wind energy system has been removed and site restoration has been completed, as defined in this Article, any balance remaining in this account shall be returned to the Applicant.**
3. **Prior to receipt of a Permit to Operate, the Applicant shall establish a Decommissioning Bond Account or similar financial instrument satisfactory to the Board of Selectmen, to cover all estimated costs of decommissioning the site, as specified in Section XV below.**
 1. **The amount of this account will be adjusted each fifth year of operation, in accordance with the estimates provided in Section XI.D.**
 2. **During decommissioning activities, the Applicant may draw down this account, in accordance to funds expended during the process, but not below a level of estimated work still outstanding.**

SECTION XIV: ENFORCEMENT AND PENALTIES

- A. **The enforcement of this Regulation shall be the responsibility of the Sharon Board of Selectmen or its agent who is hereby authorized to cause any LWES, building, place, premises or activities to be inspected, and to order in writing the remedying of any condition found to exist in violation of this regulation.**
- B. **The Board of Selectmen, Planning Board, or any official having jurisdiction, in addition to other remedies, may institute an action or proceeding to prevent the unlawful erection, alteration, reconstruction, maintenance or use of any LWES, building, place, premises or land and require the Applicant to correct or abate any unlawful act or to prevent the illegal occupation of any LWES, buildings, places, premises, or land and to prevent any illegal act in or about such premises.**
- C. **An Applicant not responding to the following conditions in the manner specified shall be considered to be in violation of this Article.**
 1. **Unsafe. If a Wind Turbine or the LWES presents an imminent physical threat of danger to life or significant threat to property, as determined by the Planning Board, the Board of Selectmen, or one of their designated agents, it shall be deemed unsafe and immediately shut down and repaired or otherwise made safe. Operations may be resumed only after it is certified safe by a New Hampshire licensed Professional Engineer approved by the Board. Members of the Board of Selectmen, or its designee, shall have the right to access the LWES to verify conditions and/or repair progress.**
 2. **Serious Violations. The Applicant of the LWES is responsible for mitigating any serious violations of standards within ten (10) business days upon receipt of written notification of determination of any serious violation attributed to the operation of the LWES. A serious violation is defined as any of the following.**
 - a. **Any measured Noise Level (Leq 10 minute) which exceeds 33 dBA where the Wind Turbine(s) is the dominant and controlling source.**
 - b. **The occurrence of Shadow Flicker, Tower Shadowing or Blade Glint exceeding the standards specified in Section IV.F of this Regulation.**
 - c. **Degradation or contamination exceeding US Environmental Protection Agency standards of any surface or subsurface water resource. (In the case of degradation or contamination of a well, the obligation for mitigation shall be deemed satisfied if the Applicant provides the affected well owner with a reasonable emergency water supply and within (30) thirty days commences implementation of corrective measures to the satisfaction of the well owner and subject to the approval of the Board of Selectmen.)**
 - d. **Any hazardous substance spill.**

- e. **Communication/electromagnetic interference (other than emergency communication).**
3. **Emergency Communication.** Interference with emergency communications must be mitigated within 24 hours.
 4. **Other Violations.** If the Board of Selectmen determines that a violation of this Article has occurred, and the violation is determined neither to be unsafe, nor a serious violation, nor interferes with emergency communications, the Board of Selectmen shall provide written notice to the Applicant, and the Applicant is responsible for mitigating the problem within thirty (30) days. In situations where significant construction or physical modification is required to mitigate the violation, the Applicant may be granted up to ninety (90) days to complete such modifications or construction.
- D. An Applicant failing to comply with any provision of this Regulation by failing to resolve a violation before the expiration of the mitigation periods defined in Subsection C of this Section may be subject to:
1. Revocation of Site Plan Approval, and shut down and removal of any Wind Turbine(s);
 2. Fines pursuant to RSA 676:17;
 3. Any other remedies the Board of Selectmen deems necessary to assure the safe operation of the LWES and protection of residents;
 4. Reimbursement to the Town of Sharon, for expenses incurred in obtaining relief, including but not limited to, reasonable attorney fees.

SECTION XV: DECOMMISSIONING

- A. The Applicant shall, at its expense, complete decommissioning (including site restoration) of the LWES, or individual Wind Turbine(s), within twelve (12) months after it is deemed unsafe, abandoned, or at the end of its useful life.
- B. Site Restoration shall include:
 1. Removal of Wind Turbines, buildings, cabling, electrical components, foundations and any other associated facilities to a depth of four (4) feet below the ground surface.
 2. Removal from the property of all items in outdoor storage.
 3. Road repair, if any, to pre-decommissioning conditions.
 4. Re-grading and re-vegetation necessary to return the subject property to the condition existing prior to establishment of the LWES. The restoration shall reflect the site-specific character including topography, vegetation, drainage, and any unique environmental features
 5. Implementation of the post-decommissioning storm water runoff plan.
- C. When decommissioning is complete and the Board of Selectmen are satisfied that all restorations are complete and not additional work is necessary by either the Applicant or by the Town, the balance of the Escrow Account and Decommissioning Bond will be released to the Applicant.

SECTION XVI: FINANCIAL ASSURANCE

- A. As a condition precedent to Site Plan Approval for a LWES, the Applicant must submit an acceptable form of financial assurance such as cash, performance bond, certificate of deposit, or irrevocable letter of credit. The amount of the financial assurance will be established by the Board and be based on what it would cost for the repair of public infrastructure (per Section IV:G) and for the decommissioning of the LWES and reclamation of the site in the event the Applicant fails to do so.
- B. The amount of financial assurance shall be reviewed periodically by the Board of Selectmen to assure it meets anticipated decommissioning costs. Financial assurance may be adjusted, upwards or downwards, when determined to be appropriate by the Board of Selectmen. For instance, the Board of Selectmen may adjust financial assurance based upon prevailing or projected interest or inflation rates, or the latest cost estimates for decommissioning.
- C. Such financial assurance shall be kept in full force and effect during the entire time a LWES facility exists or is in place. Such financial assurance shall be irrevocable and non-cancelable until such time as the Board of Selectmen certifies that decommissioning and reclamation are complete and releases the obligation. If the owner fails to remove the LWES and reclaim the site, the Town of Sharon may remove or cause the removal of the LWES and the reclamation of the site. The Town may recover the cost of decommissioning and reclamation from any financial assurance provided by the owner. Any decommissioning and reclamation cost incurred by the Town that is not recovered from the owner will become a lien on the property where the removal or reclamation takes place and may be collected from the landowner in the same manner as

property taxes.

- D. If the Applicant fails to complete decommissioning within the periods prescribed above, then the Town may take such measures as necessary to complete decommissioning. The entry into and submission of evidence of a Participating Landowner agreement to the Town 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 as specified in the Sharon Site Plan Review Regulations.
- E. The escrow agent shall release the decommissioning funds when the Applicant has demonstrated and the Town concurs that decommissioning has been satisfactorily completed, or upon written approval of the Town in order to implement the decommissioning plan.
- F. The entry into and submission of evidence of a Participating Landowner agreement with the Planning Board or Board of Selectmen and/or Applicant shall include 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.

SECTION XVII: AMENDMENTS

These Regulations may be amended from time to time by majority vote of the Board following a duly noticed public hearing as specified in NH RSA 675:6.

SECTION XVIII: SEVERABILITY

The invalidity of any provision of these Regulations shall not affect the validity of any other provision, nor any prior decisions made on the basis of the valid provisions of this Article.

SECTION XIX: EFFECTIVE DATE

This Regulation shall take effect passage and the passage of an enabling Ordinance, as amended.

Revised March 8, 2016