TABLE OF CONTENTS

Section: 1 Title ---- 4

Section: 2 Purpose ---- 4

Section: 3 Authority ---- 4

Section: 4 Conflicts with Other Ordinances, Laws and Regulations ---- 4

Section: 5 Validity and Severability ---- 4

Section: 6 Effective Date ---- 4

Section: 7 Applicability ---- 5

Section: 8 Permitting Authority ---- 5

Section: 9 Cumulative Effect of Multiple Permits ---- 5

Section: 10 Appeals ---- 5

Section: 11 Professional Services ---- 6

Section: 12 Classification of Wind Turbines and Meteorological Towers ---- 6

Section: 13 Fees ---- 8

Section: 14 Ethical Standards ---- 8

Section: 15 Jurisdiction ---- 10

Section: 16 WEF Permit Requirement ---- 11

Section: 17 Permit Review Procedure ---- 11

Section: 18 Pre Application ---- 14

Section: 19 Application Changes ---- 14

Section: 20 Site Visit Checklist ---- 14

Section: 21 Notice of Application and Site Visit ---- 14

Section: 22 Town Wide Notification ---- 14

Section: 23 Final Determination ---- 15

Section: 24 WEF Submission Standards ---- 15

Section: 25 Setback Standards ---- 21

Section: 26 Sound Standards ---- 21

Section: 27 Shadow Flicker and Blade Reflection Standard ---------- 22
Section: 28 Mitigation Waivers ---------- 22
Section: 29 Financial Performance Standard ---------- 23
Section: 30 General Standards ---------- 23
Section: 31 Appearance Standards ---------- 24
Section: 32 Safety Standards ---------- 25
Section: 33 Inspections ---------- 25
Section: 34 Liability Insurance ---------- 25
Section: 35 Environmental Impact Standards ---------- 25
Section: 36 Construction/Design Standards ---------- 29
Section: 37 Public Safety and Health Standards ---------- 30
Section: 38 Communications and Electromagnetic Interference Standards ---------- 31
Section: 39 Ground Transportation Standards ---------- 32
Section: 40 Reporting Requirements ---------- 33
Section: 41 Sound Measurement Procedures ---------- 34
Section: 42 Licensing ---------- 39
Section: 43 Decommissioning ---------- 42
Section: 44 Complaint / Violations ---------- 43
Section: 45 Definitions ---------- 48
Appendix A ---------- 56
Appendix B ---------- 59
Appendix C ---------- 62
Appendix D ---------- 63
Appendix E ---------- 64

TOWN OF BUCKFIELD
WIND ENERGY FACILITY ORDINANCE

Section 1 - Title

This Ordinance shall be known as the Town of Buckfield Wind Energy Facility (WEF) Ordinance.

Section 2 - Purpose

The purpose of this Ordinance is to regulate Wind Energy Facilities to protect and safeguard the health, safety, and general welfare of the citizens of Buckfield by establishing reasonable and uniform regulations.

Section 3 - 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, etc. seq. (Comprehensive Planning and Land Use Regulation, or "Growth Management Act").

Section 4 - Conflicts with Other Ordinances, Laws and Regulations

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

Section 5 - Validity and Severability

Should any section or provision of this Ordinance be declared by the courts to be invalid such decisions shall not invalidate any other section or provision of the Ordinance.

Section 6 - Effective Date

This Ordinance shall become effective upon the date of its Passage at the June 26, 2010 Annual Town Meeting.

Section 7 - Applicability

This Ordinance applies to any wind turbine that is the subject of a permit or license application pending before, or filed with the Town of Buckfield, after the effective date of the Ordinance.

Section 8 - Permitting Authority

8.1 The Town of Buckfield Planning Board is authorized to review all WEF applications and may approve, reject or conditionally approve such applications in accordance with the standards of the Ordinance.

8.2 The Maine Department of Environmental Protection (DEP) may be required to review WEF applications. The Planning Board shall consider, at a minimum and to the extent applicable, pertinent findings in the DEP certification when making its determination.

8.3 The following WEF's require authorization to participate in by a vote of the residents of the Town of Buckfield:

8.3.1 Any WEF to be built on property owned by the Town

8.3.2 Any WEF partially or totally owned by the Town.

Section 9 - Cumulative Effect of Multiple Permits

The Town of Buckfield reserves the right to limit the total number of WEF permits that are under review for approval at any given time. The Permitting Authority will process no more than one application at any one time, or the deadline for submission and review may be modified correspondingly to reflect the increased workload of multiple permits.

Section 10 - Appeals

10.1 All appeals of Planning Board decisions shall be filed with the Oxford County Superior Court.

10.2 A final Town vote as outlined in Section 8.3 shall not be subject to review.

Section 11 - Professional Services

In reviewing an application for compliance with this Ordinance, the Permitting Authority may retain professional services as necessary to assist with its review, including but not limited to those of an attorney, engineer, biologist, or land use planner. Within fourteen (14) days of filing an application the Applicant shall provide to the Town Clerk for deposit into en escrow account funds in the amount of $25,000 as partial payment for the appropriate Town expenses in hiring consultants, experts, mailings, printing and advertising costs as the Permitting Authority shall, at its discretion, deem necessary. If at any time the balance of the fund falls below $5,000, the Applicant upon notice shall submit an additional $25,000 so that the Town's full and actual expenses of examining and verifying the data presented by the Applicant can be paid. If at any time the balance of this fund falls below $5000 for a period of 30 days after notification the application shall be considered to have been withdrawn. The balance of the account shall be returned to the Owner/operator after all expenses have been paid, and after a permit is granted / denied or withdrawn.

Section 12 - Classification of Wind Turbines and Meteorological Towers

For the purpose of clarification, all WEFs are classified according to the following definitions:

12.1 Wind Turbine Classifications

12.1.1 Type 1 — Small Wind Turbine means a single wind turbine with a nameplate capacity less than 10 kW, and a turbine height less than 100 feet.

12.1.1.1 This classification must meet sections 1, 2, 3, 4, 5, 6, 7, 8, 9.10, 12, 13, 14.1, 14.3.7, 16.1.1, 17.1, 17.4, 17.5, 17.6, 17.9, 18, 23, 24.1.1, 24.2.1, 24.2.2, 24.2.4, 24.2.5, 24.2.12, 24.2.51, 26, 30.1, 30.2, 30.5, 31, 32, 35.1.1, 35.2.3, 35.2.4, 36.1, 37.1.1, 37.2, 38, 44, 45 of this ordinance as well as section 25.1 which the Planning Board may reduce to one and one half times the turbine height and 17.3 which shall only require notification of the abutters until such time as the Town of Buckfield adopts a separate Ordinance to govern this class at which time section 12.1.1.1 shall be automatically repealed.

12.1.2 Type 2 — Intermediate Wind Turbine means a single wind turbine with a nameplate capacity less than 100 kW, and a turbine height less than 150 feet, and not requiring a Site Location of Development permit from the Maine Department of Environmental Protection (DEP).

12.1.2.1 This classification must meet sections 1, 2, 3, 4, 5, 6, 7, 8, 9.10, 12, 13,14.1, 14.3.7, 16.1.1, 17.1, 17.4, 17.5, 17.6, 17.9, 18, 23, 24.1.1, 24.2.1, 24.2.2, 24.2.4, 24.2.5, 24.2.12, 24.2.51, 26, 30.1, 30.2, 30.5, 31, 32, 35.1.1, 35.2.3, 35.2.4, 36.1, 37.1.1, 37.2, 38, 44, 45 of this ordinance as well as section 25.1 which the Planning Board may reduce to one and one half times the turbine height and 17.3 which shall only require notification of the abutters until such time as the Town of Buckfield adopts a separate Ordinance to govern this class at which time section 12.1.2.1 shall be automatically repealed.

12.1.3 Type 3 — Large Wind Turbine means up to three wind turbines with a nameplate capacity of 100 kW to 1 MW, and a turbine height of 150 to 300 feet.

12.1.4 Type 4 — Industrial Wind Turbine means one or more wind turbines each with a nameplate capacity of greater than 1 MW, or a turbine height greater than 300 feet; or more than three Type 3 Wind Turbines.

12.2 Meteorological Towers (MET Towers)

MET towers shall be permitted under this Ordinance, with no height limitations, other than those imposed under State or Federal law. A Setback of 150% of the tower height shall be required from the nearest property line. A permit for a temporary MET tower shall be valid for a maximum of two years after which a single extension of up to one year may be granted. The site shall be restored to a condition that will not create erosion problems within 30 days following removal of the tower. Application for a MET Tower shall be submitted to the Town of Buckfield Code Enforcement Officer and he/she may issue a permit for construction after providing to the applicant a copy of this Ordinance and verification that the setback distance will be adhered to. The Code Enforcement Officer will have 45 days to inform the Planning Board of the issuance of a MET Tower permit.

Section 13 - Fees

All fees for this ordinance shall be set by the Buckfield Board of Selectmen and may be changed by them as they deem necessary. See Appendix E for a fee schedule.

Section 14 - Ethical Standards

14.1 Transparency, Public Participation and Highest Ethical Standards All public deliberations and decisions regarding WEFs and Community Owned Wind shall be conducted in an open, transparent manner that encourages the broadest public participation and adherence to the highest ethical standards.

14.2 Public Access

14.2.1 All deliberations concerning WEFs and Community Owned Wind, whether in writing or conducted verbally, by the Planning Board, Selectmen, and any subcommittees or working groups of the aforementioned bodies shall fully comply with the letter and spirit of State law regarding Freedom of Access pursuant to Title 1; Chapter 13; Subchapter 1. Specifically, all deliberations regarding WEFs between members of the Planning Board, Selectmen, and any subcommittees and working groups shall be conducted at public meetings, which have been duly posted. Exceptions will be made only for: 1) appropriately recorded and executed executive sessions, and 2) communicating the minimal information necessary to set up and facilitate public meetings. Detailed minutes of deliberations and decisions concerning WEFs and Community Owned Wind will be recorded and posted. Copies of all correspondence and e-mails will be made available to the public with the exception of those publicly identified and disclosed as being subject to "attorney-client privilege" by the Town attorney. All documents, correspondence and e-mails generated by consultants on behalf of the Planning Board, the Selectmen, their subcommittees and working groups shall be part of the public record.

14.3 Conflicts of Interest

14.3.1 The process to develop, permit and administer WEFs or Community Owned Wind shall be governed by a strict ethical code for conflicts of interest. No elected or appointed Town official or Town employee, their immediate family members, or their employees, who has a conflict of

interest shall be directly or indirectly involved in the planning process or decision-making process for WEFs. Conflicts of interest include but are not limited to:

14.3.1 Having a lease as a Participating Landowner for a Wind Turbine or transmission right-of-way,

14.3.2 Having an identified financial arrangement with a wind development company including a signed Mitigation Waiver with financial remuneration,

14.3.3 Serving as a paid representative of a wind development company, or a written or verbal promise for future employment or contracts from a wind development company;

14.3.4 Being directly or indirectly affiliated or related to an Applicant with a pending application for a WEF, and,

14.3.5 Knowing there is a substantial opportunity to accept bids, receive remuneration, or employment valued at greater than $10,000 on behalf of a wind development company or as a subcontractor or employee of the Community Owned Wind.

14.3.6 Living within or having an immediate family member living within the setback area.

14.3.7 All decision-makers must be free from bias and able to evaluate an application in accordance with the provisions of this ordinance.

14.4 Individuals with a conflict of interest must identify the conflict of interest and recuse themselves from all direct and indirect planning and decision making regarding WEFs or Community Owned Wind, with the exception of voting and debating as a private citizen at any public meetings and public hearings.

14.5 Bidding and Contracting

14.5.1 All bidding, contracts and employment for WEF's the town has greater than 10% interest in or are being placed on town owned property must be awarded through a process of public notice and competitive bidding. The Town of Buckfield reserves the right to require the design of the bidding process to favor local contracts and local employment.

14.6 Code of Ethics for Wind Companies and Municipal Employees

14.6.1 Wind companies will not hire municipal employees or their relatives, give gifts of more than $10 during a one-year period, or provide any other form of compensation that is contingent on any action before a municipal agency

14.6.2 Wind companies will not solicit, use, or knowingly receive confidential information acquired by a municipal officer in the course of his or her official duties.

14.6.3 Wind companies will submit to the Planning Board the names of all municipal officers or their relatives who have a financial stake in WEF development.

14.6.4 Wind companies will submit, in writing to the town clerk for public inspection, the nature and scope of the municipal officers' financial interest.

Section 15 - Jurisdiction Across Multiple Municipalities

This section addresses issues unique to the geography of the Town of Buckfield and its neighboring towns with which it shares a common boundary. In the event that potential sites for WEFs share multiple municipal jurisdictions, project permits should be coordinated to the fullest extent possible across town boundaries, while at the same time maintaining each individual Town's right to individual Home Rule.

15.1 This Ordinance applies to WEFs located wholly or partially in the Town of Buckfield to the fullest extent allowable by municipal, state, and federal law.

15.2 Approval to build or operate a WEF applies only to that portion of the WEF located within the boundaries of the Town of Buckfield. However, the application must take into account the entire WEF across municipal boundaries, including but not limited to the total number of Wind Turbines, Turbine Height, Wind Turbine location and all other relevant facts and data that may directly or indirectly affect the operation and viability of that portion of the WEF located in the Town of Buckfield.

15.3 Setback, Sound, Shadow Flicker and Mitigation Waiver standards for WEFs located and operated in the Town of Buckfield shall apply to property lines and roads irrespective of Town boundaries. For the purpose of this section a resident of such abutting towns is afforded the same protections as a resident of Buckfield.

15.4 This subsection applies to WEFs that are located partially in Buckfield and partially in neighboring Towns. The Applicant will comply with all portions of this ordinance as they apply to the portion within the town lines of Buckfield

15.5 The Town Clerk shall forward notice of WEF permit applications within 10 days of receipt, and notice of hearings and public meetings 14 days in advance, to the Selectmen and Planning Boards of adjacent communities for all WEFs if the neighboring community is located within a defined Setback of this Ordinance.

Section 16 - WEF Permit Requirement

16.1 Permit Requirement

16.1.1 A permit is required for each WEF built in the Town of Buckfield after the effective date of this Ordinance.

16.1.2 With the exception of Projects that are separated by substantial geographic distance, the Planning Board will aggregate, to the fullest and most practical extent possible, all Wind Turbines held under greater than 50% common or related ownership into a single WEF permit application.

16.1.3 Receipt of a permit under this Ordinance does not relieve the Owner/operator from the responsibility to obtain any other such permits, licenses or approvals as required under this or any other Town of Buckfield Regulations, Ordinance or pursuant to other State or Federal jurisdiction.

16.2.1 Where an Applicant is applying for a new or amended WEF Permit, the application for a WEF Operating License, or amended license, shall be submitted to the Planning Board in conjunction with the Permit application, and shall include the application form and the separate fee specified in Section 13.

Section 17 - Permit Review Procedure

17.1 Pre-application Meeting
10 copies of the pre-application shall be submitted to the Code Enforcement Officer at least 14 days in advance of the regularly scheduled monthly Planning Board meeting.
A pre-application meeting with the Planning Board will be scheduled at a regularly scheduled public Planning Board meeting. At the meeting the Applicant will review the type and scope of the project and the Planning Board will review Ordinance Standards and

submission requirements. The Planning Board will establish an application file at this time.

17.2 Site Inspection
Planning Board and Applicant will set a mutually agreeable time for the Planning Board to inspect the site. The inspection will be scheduled within 45 days of the pre-application meeting unless rendered impractical due to seasonal conditions. Site visits will normally be postponed if there is more than one foot of snow on the ground. The site inspection will be treated as a public meeting of the Planning Board with appropriate notices given to the community. While the Planning Board may set additional requirements for the site inspection at the pre-application meeting, the Applicant shall, at minimum, flag the location of the proposed WEF and relevant property boundaries. The Applicant or a representative will accompany the Planning Board to describe the project and answer any questions.

17.3 Notice to Abutters and residents within the Notification Area
In addition to any required public notices for the site inspection, the Planning Board will prepare a notice to property owners and residents within the Notification Area. The notice will briefly describe the proposed WEF and notify the recipient of the dates, times and places of the site inspection. The notice will be sent by certified mail to abutters and first class mail to all others with mailing costs paid for by the Applicant. The town will give residents no less than 14 days' notice of such a meeting.

17.4 Determine Submission Requirements
Within 63 days of the site inspection the Planning Board shall inform the Applicant in writing of any additional submission requirements for the application. The minimum submission requirements for WEFs are listed in Section 24. If the Applicant wishes to have any of the submission requirements waived, the Applicant must make the request in writing to the Planning Board. The Planning Board will notify property owners and residents within the Notification Area. The notice will be sent by certified mail to abutters and first class mail to all others with mailing costs paid for by the Applicant. The Planning Board will send the notice at least 14 days prior to the Planning Board meeting at which the Applicant's request will be considered.

17.5 Application Submission
The Applicant has up to 180 days after the determination of submission requirements to submit a completed application with the required fees to the Code Enforcement Officer. The application shall be deemed abandoned unless the application has been

received within 180 days of the determination of submission requirements unless an extension time frame is agreed to by the applicant and the Planning Board. The Code Enforcement Officer will forward the application to the Planning Board.

17.6 Completeness Review
The Planning Board will notify the Applicant within 80 days from the date of submission whether the application is complete. Specific studies may be required for a consideration of completeness including but not limited to sound studies, DEP certification and permitting, and environmental impact studies. If the application is deemed to be incomplete the Planning Board shall indicate the additional information needed. The application shall be deemed abandoned unless the Applicant provides the information requested, demonstrates that additional time is needed to complete required studies, or submits in writing the reason for any delay within 30 days from the date of notice indicating the application is incomplete.

17.7 Public Hearing
The Planning Board shall schedule a public hearing to be held within 63 days of the determination of completeness of the Application for the WEF.

17.8 Notice to Town of Buckfield
In addition to any required public notices for the public hearing, the Planning Board will prepare a notice to all residents and property owners in the Town of Buckfield and to property owners and residents within the Notification Area. The notice will briefly describe the proposed WEF and notify the recipient of the date, time and place of the public hearing. The notice will be sent by certified mail to all abutters and first class mail to all others with mailing costs paid for by the Applicant. The town will give residents no less than 14 days' notice of such a meeting.

17.9 Final Planning Board Determination
A decision to approve or reject the application, or to approve the application with conditions, will be made by the Planning Board within 63 days from the date of the public hearing.

17.10 Final Town Approval
Final Town approval is required if the WEF is located on Town property or if the WEF is wholly or partially owned by the Town.

Section 18 - Application Changes

18.1 Throughout the permit process, the Applicant shall promptly notify the Permitting Authority of any changes to the information contained in the permit application.

18.2 Material changes may not be made to a WEF after an application is determined to be complete,
without initiating a new application process. Material changes include, but are not limited to, increasing the number of Wind Turbines, increasing the nameplate capacity of the Wind Turbines, increasing Turbine Height, changes to the location of Wind Turbines, or material changes to Associated Facilities. Non-material changes require a permit modification as determined by the Permitting Authority. The Permitting Authority shall have sole discretion for determining what is a material or non-material change.

Section 19 - Pre Application

A completed Pre Application form must be submitted 14 days prior to the Planning Boards regularly scheduled monthly meeting that an applicant wishes to have it reviewed. The Pre application may be obtained from the Town of Buckfield Code Enforcement Officer or see Appendix A.

Section 20 - Site Visit Checklist

The Planning Board will use the Site Visit Checklist found in Appendix B to gather information about the site to assist them in determining their needs in the application process.

Section 21 - Notification Area: Notice of Application and Site Visit

The Planning Board shall direct the Town Clerk to send out the notice as described in 17.3 to the best of her/his ability to all property owners within the Notification Area. This shall be accomplished by mailing a copy of the notice (Appendix C) to the last known address recorded in the Town of Buckfield Tax Assessment Records.

Section 22 - Town Wide Notification

The Planning Board shall direct the Town Clerk to send out the notice as described in 17.8 to the best of her/his ability to all residents and property owners. This shall be accomplished by mailing a copy of the notice (Appendix D) to occupant and supplying the Post Office with enough copies for each mailing address in the Town of Buckfield and preparing a

list of property owners that are not residents from the tax assessing record and mailing a copy to them as well. Only one copy of the notice must be mailed per address no matter the number of individuals living on or having claim to any given property. Failure of some individuals to receive notice in no way infringes on the review process of the application.

Section 23 - Final Determination

The Planning Board will provide a written finding of fact based on the requirements of the ordinance within 60 days of their final determination. The finding of facts will show the recorded vote of each criteria and the finding of facts associated with the criteria reviewed.

Section 24 - WEF Submission Standards and Fees

24.1 Fees and Bonds.

24.1.1 Application Fee: See Section 13

24.1.2 Professional Fees Escrow: See section 11

24.1.3 Decommissioning Bond: See Section 43.4

24.1.4 Road Damage Bond: See Section 39.3

24.2 Submission standards.
All information in this application, unless otherwise deemed confidential in accordance with Maine's Freedom of Access Law, will become part of the public record. Information submitted by the Applicant must be continuously updated throughout the application process as changes are made or new information becomes available. The Applicant shall include a written application, which shall include:

24.2.1 Applicant's name and contact information.

24.2.2 Legal Owner/operator and contact information

24.2.3 Description of the legal structure of the WEF.

24.2.4 Description of the proposed WEF that includes the number of Wind Turbines, the nameplate capacity of each Wind Turbine, Turbine Height and manufacturer's specifications for each Wind Turbine, the aggregate generating capacity of the entire project, and a description of associated facilities.

24.2.5 Location map of the project showing the location of the each Wind Turbine, associated facilities, all property under partial or total control of Applicant including easements and those under lease with Participating Landowners, roads, municipal boundaries, proximity to all Scenic or Special Resource features in the Town of Buckfield and major geographical features.

24.2.6 Detailed site plan showing the location of each Wind Turbine and Associated Facility and any of the following features located within 1.5 times the required setback: property boundaries, required setbacks, topographic contour lines (maximum 20-foot interval), buildings (identify use), roads, driveways, right-of-ways, overhead utility lines, Scenic or Special Resources, tree cover, wetlands, streams, water bodies, areas proposed to be cleared of vegetation or re-graded, and areas proposed to be significantly excavated or blasted.

24.2.7 Copies of all Participating Landowner agreements and easement agreements.

24.2.8 Copies of any deeds or purchase agreements for land owned or under option by the Owner/operator.

24.2.9 Proof of financing.

24.2.10 Reference list of all previous WEFs with which the Owner/operator has been affiliated.

24.2.11 Proof of compliance with all required setbacks. The Applicant shall work with the Permitting Authority to complete a pre-construction sound study in accordance with Sections 26 & 41. This study must be completed before the permit can be approved.

24.2.12 A detailed sound prediction model for worst-case sound scenarios based on wind speed and wind direction for the WEFs. The study shall be projected onto a contour map for a minimum of two miles from each Wind Turbine. Worst-case scenarios for each property line within the 2-mile radius, measured horizontally from the Project Boundary, shall be reported in table form. The model will address the unique mountainous terrain of the area. Sound predictions will include both single source and line source origination. All underlying assumptions and algorithms in the model will be documented.

24.2.13 As part of the review process, the Applicant will provide written demonstration that the sound standards in this Ordinance will be met.

24.2.14 The Wind Turbine manufacturer's sound emission specifications for each Wind Turbine model.

24.2.15 A shadow flicker and blade reflection model for the proposed WEF. The model will provide a worst-case scenario (100%) seasonal representation for each Occupied Building within two miles of any Wind Turbine. The model will calculate maximum hours of shadow flicker and blade reflection in table form for each Occupied Building. A worst-case scenario shall also be constructed for vehicle traffic.

24.2.16 Copies of all executed Mitigation Waiver agreements concerning Setbacks, Sound and Shadow Flicker/Blade Reflection.

24.2.17 Written demonstration that the Wind Turbine Plan is consistent with all other Buckfield regulations, ordinances and policies.

24.2.18 Documentation showing compliance with Section 35.1.1, both during construction and post construction.

24.2.19 Documentation showing compliance with Section 35.2 and with Section 35.2.3.

24.2.20 Documentation showing compliance with Section 35.2.4. Documentation must include a construction site erosion plan and storm water runoff control plan that minimizes potential adverse impacts on streams and wetlands.

24.2.21 Documentation showing compliance with Section 35.2.5.

24.2.22 Documentation showing compliance with Section 35.2.6.

24.2.23 Written evidence that the Environmental Coordinator of the Maine Department of Inland Fisheries and Wildlife and the Maine Natural Areas Program have both been notified of the pending application and the location and Turbine Height of all proposed Wind Turbines.

24.2.24 A Location of Development permit from the Maine Department of Environmental Protection (DEP) or proof none is required

24.2.25 A visual impact assessment pursuant to Section 35.3

24.2.26 Photographs of existing conditions of each Wind Turbine and associated facility site.

24.2.27 Sight line, photographic, and elevation information shall be provided from: 1) each Occupied Building within the Setback; 2) from any Scenic or Special Resource location and other locations as the Permitting Authority deems necessary.

24.2.27.1 A Sight Line Representation shall be drawn that shows the lowest point to the Wind Turbine visible from each location. Each sight line shall be depicted in profile, drawn at one-inch equals 40 feet. The profiles shall show all intervening trees and physical structures.

24.2.27.2 Each Sight Line shall be illustrated by one four-inch by six-inch color photograph of the current view.

24.2.27.3 Each of the existing condition photographs shall have the proposed Wind Turbines superimposed on it to accurately simulate the WEF when built.

24.2.27.4 Elevations of the tops of any structures on the subject property relative to the elevation of the Wind Turbines(s)

24.2.27.5 The height and elevation relative to the Wind Turbine(s) of trees, both existing and proposed, that are to provide visual buffering. In the case of trees to be planted, the proposed height at the time of planting as well as the projected mature height is to be provided.

24.2.28 Demonstrate compliance with Section 30 Provide a written description of emergency and normal shutdown operations.

24.2.29 Demonstrate compliance with Section 31 Submit required permits from the Federal Aviation Administration or proof none are required.

24.2.30 Demonstrates compliance with Section 32

24.2.31 Submit contract with Maine licensed professional engineer to conduct post construction structural and operational inspection and written agreement by Applicant to submit proof of successful inspection as a condition of permitting before operating WEF

24.2.32 Proof of liability Insurance in the amount of one million dollars ($1,000,000.00) per occurrence per turbine.

24.2.33 Time-line showing all aspects of the construction.

24.2.34 Photographs and detailed drawings of each Wind Turbine, including foundation design. Details must be provided of all significant excavation and blasting.

24.2.35 Demonstrate compliance with Section 36. A map shall be provided showing all transmission lines and rights-of-way that will need to be built or upgraded to accommodate the WEF. Applicant shall submit copies of signed letters of intent to grant easements, long term leases or other property rights from involved landowners and any governmental unit responsible for access, approval or construction of electric transmission and distribution lines, whether part of the WEF or part of the local electrical distribution grid. The Applicant shall submit an affidavit stating that no property will need to be taken by eminent domain to facilitate transmission lines necessary to support the project.

24.2.36 A geological report from a registered geotechnical engineer demonstrating that the soils can support the Wind Turbines and the underlying ground is geologically stable. The report shall include a slope stability analysis and any underlying fault zones.

24.2.37 A written summary of all routine operation and maintenance procedures for the WEF.

24.2.38 Demonstrate compliance with Section 37. Provide an estimate of required new equipment and training to be provided.

24.2.39 Document all potential hazardous wastes that will be used on the WEF, including but not limited to any chemicals used to clean the Wind Turbine blades, and how these wastes

will be transported, handled, stored, cleaned up if spilled, and disposed of during any phase of the project's life.

24.2.40 A communication/electromagnetic interference study prepared by a registered professional engineer showing that the proposed WEF will comply with Section 38. The Owner/operator will sign an affidavit stating that the owner /operator shall be responsible for the full cost of remediation to remain in compliance with Section 38.

24.2.41 Demonstrate compliance with Section 39. Before and after photographs or videos of the roadways, in a format approved by the Permitting Authority, shall be submitted as part of the documentation process.

24.2.42 A road and property use and risk assessment plan in compliance with Sub-Section 39.6.

24.2.43 An affidavit agreeing to comply with all provisions in Section 40.

24.2.44 An affidavit agreeing to comply with all provisions in Section 44.

24.2.45 A decommissioning plan in compliance with Section 43.

24.2.46 Copies of all written agreements and disclosure of all verbal promises, for contracts, subcontracts, employment, consulting fees, gifts or other remuneration in excess of $10 (cash or in-kind) to residents or businesses in Buckfield, either previously made or contingent on permitting of this project.

24.2.47 An Affidavit agreeing to comply with all provisions of Section 14

24.2.48 Applicant shall deliver a letter by certified mail to the owner of any property that the Applicant proposes to be restricted by the permit. The letter will state that the Applicant has filed an application, list future development that will be restricted, and to what extent it will be restricted, on abutting properties by virtue of the permit being granted. Examples of restrictions include, but are not limited to, building Occupied Buildings within the setback area without a Mitigation Waiver, building structures (i.e. Wind Turbines or cell towers that the WEF would interfere

with), zones in which future telecommunication installations can expect interference from the WEF. Applicant must provide fair compensation to any nonparticipating landowners within the setback areas for restricting future development of their property.

24.2.49 Proof that the Applicant has notified the following agencies via certified mail and received any necessary permits or permissions for the project:

24.2.49.1 Federal Aviation Administration.

24.2.49.2 Department of Defense facilities located within 50 miles from the proposed WEF.

24.2.50 Other relevant studies, reports, certifications and approvals as may be reasonably requested by the Permitting Authority to ensure compliance with this Ordinance.

24.2.51 Signed affidavit from the Owner/operator that Applicant has read the Town of Buckfield Wind Turbine Ordinance and agrees to abide by its provisions, as may be amended from time to time.

Section 25 - Setback Standards

25.1 Setback to Non-participating Landowner Property Lines is the greater of one (1) mile or thirteen times the turbine height. Property owners may waive this setback with a legally executed written Mitigation Waiver. (See Section 28).

25.2 Setback to Public Roads is no less than 4 times the turbine height, measured horizontally.

Section 26 - Sound Standards

For all WEF's, the primary guiding principle is that their operation must not be disruptive at any time of day or night. Sound measurement standards and procedures are described in Section 26 & 41

26.1 Sound Limits at Non-participating Property Lines

26.1.1 No WEF turbine shall be located so as to cause an exceedance of the preconstruction/operation background sound levels by more than 5 dBA or dBC for day and evening (as defined in section 41.17.1 & 41.17.2) .

26.1.2 No WEF turbine shall be located so as to exceed the preconstruction/operation background sound levels by more than 3 dBA or dBC at night (as defined in section 41.17.3)

26.2 Audible sound levels (dBA) due to wind turbine operation will not exceed the pre-construction ambient sound as defined in 26.1 as measured at any property line. Property owners may waive this sound restriction with a written Mitigation Waiver. (See Section 28)

26.3 Low frequency sound levels (dBC) due to wind turbine operation as measured inside any occupied structure or at any Property Line will not exceed:

26.3.1 Twenty (20) decibels (measured as dBC) above the pre-development ambient sound level (measured as dBA). There is a maximum not-to-exceed level of 50 dBC. Property owners may waive this sound restriction with a written Mitigation Waiver. (See Section 28.)

Section 27 - Shadow Flicker and Blade Reflection Standard

WEFs shall be designed and sited so that shadow flicker and/or blade reflection will not fall on a receptor as defined in Section 45. Exceptions to this standard may be made based on the following condition only if the flicker or reflection does not exceed 10 hours per year for any given receptor. Property owners may waive the Shadow Flicker and Blade Reflection restriction with a written Mitigation Waiver. (See Section 28)

Section 28 - Mitigation Waivers

Non-participating Landowners may modify or waive certain specified protections in this Ordinance using a written, legally enforceable Mitigation Waiver negotiated between the Applicant and the Non-participating Landowner. Copies of executed Mitigation Waivers must be included with the application. The Mitigation Waiver must be recorded in the Register of Deeds office appropriate for the affected property. The deed must advise all subsequent owners of the burdened property.

28.1 The requirements permitted in Mitigation Waivers are:

28.1.1 Property line setbacks — Section 25

28.1.2 Audible sound levels — Section 26

28.1.3 Low frequency sound levels — Sub-Section 26.3

28.1.4 Shadow Flicker and Blade Reflection — Section 27

28.1.5 No Mitigation Waivers on other requirements set forth in this Ordinance are permitted.

28.2 The Mitigation Waiver must contain a separate paragraph for each specific requirement being modified or waived. Each paragraph must specify:

28.2.1 The requirement as set forth in this ordinance

28.2.2 The modified requirement to which the affected property owner is now agreeing.

Section 29 - Financial Performance Standard

The Applicant must demonstrate that the WEF is financially viable and that the Owner/operator has the financial ability to complete the project.

Section 30 - General Standards

All WEFs applicants shall comply with the all standards unless waived by the permitting authority. No WEF shall cause unreasonable health or safety conditions.

30.1 Building Codes. All components of the WEF shall conform to local, state and national building codes.

30.2 Electrical Components and Interconnections. All electrical components of the Wind Turbine and WEF shall conform to relevant and applicable local, state, and national codes.

30.3 Controls and Brakes. Each Wind Turbine shall be equipped with a redundant braking system that includes both aerodynamic over-speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall operate in fail-safe mode. Stall regulation shall not be considered a sufficient braking system for over-speed protection.

30.4 Blade Clearance. The minimum distance between the ground and all blades of a Wind Turbine shall be 100 feet as measured at the lowest arc of the blades.

30.5 Signal Interference. WEFs will be designed and sited to prevent the disruption or loss of radio, telephone, television, or similar signals. (See Section 38.)

30.6 Guy Wires and Blade Feathering.
Monopole towers with no guy wires are preferred to minimize bat and migratory bird fatalities, and bird fatalities in general. Bird flight diverters must be installed on any tower with guy wires.

Section 31 - Appearance Standards

31.1 Wind Turbines shall be a non-obtrusive color such as white, off-white or gray, or as may otherwise be required by another governmental agency with jurisdiction over the WEF

31.1.2 The design of the buildings and related structures shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend the site to the natural setting and existing environment.

31.1.3 Wind Turbines shall not be artificially lighted, except to the extent consistent with Federal Aviation Administration recommendations or other applicable authority that regulates air safety or as is otherwise required by another governmental agency with jurisdiction over the WEF. Additional lighting standards must be met for Wind Turbines (see Section 35.2.7).

31.1.4 Wind Turbines shall not be used to support signs and shall not display advertising except for reasonable and incidental identification of the turbine manufacturer, facility owner and operator, emergency contact information, and for any appropriate warnings.

31.1.5 Each Wind Turbine shall be located to reasonably maximize the effectiveness of existing vegetation, structures and topographic features to screen views of the Wind Turbine(s) from Occupied Buildings of Non-participating Land Owners, Scenic Resources and public roads.

31.1.6 When existing features do not screen views of a Wind Turbine from Occupied Buildings of Non-participating Landowners, Scenic Resources and public roads, screening shall be provided, where feasible and effective, through the planting of trees and/or shrubs. Generally, such plantings should be of native varieties. In order to maximize the screening effect and minimize wind turbulence near the Wind Turbine, plantings should be situated as near as possible to the Occupied Buildings, Scenic Resources and/or public roads.

Section 32 - Safety Standards

32.1 Design. The design of the Wind Turbines and WEF 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.

32.2 Access. All ground-mounted electrical and control equipment and all access doors to a Wind Turbine shall be labeled and secured to prevent unauthorized access. A Wind Tower shall not be climbable up to fifteen (15) feet above ground surface.

32.3 Warnings. A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

Section 33 - Inspections

Wind Turbines shall be inspected after construction is completed but before becoming operational, and at least every year thereafter, for structural and operational integrity by a Maine licensed professional engineer and the Owner/operator shall submit a copy of the inspection report to the Enforcing Authority. If such report recommends that repairs or maintenance are to be conducted, the owner shall provide the Enforcing Authority 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.

Section 34 - Liability Insurance

The Applicant shall maintain a current general liability policy for the WEF that covers bodily injury and property damage in an amount commensurate with the scope and scale of the Turbine or Project. The Applicant or its designee shall provide certificates of insurance to the Planning Board, and provide a copy of each annual renewal to the Planning Board. (See Sub-Section 24.2.33.)

Section 35 - Environmental Impact Standards

35.1 Environmentally Sensitive Area.

35.1.1 The plan for the WEF will reflect the natural capabilities of the site to support development.

Environmentally sensitive areas, including but not limited to wetlands, steep slopes, watersheds, floodplains, significant wildlife habitats, fisheries, habitat for rare or endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers will be maintained and preserved to the maximum extent. The Applicant shall demonstrate appropriate measures for protecting these resources, including both during construction and post construction.

35.1.2 Given that areas within the Town of Buckfield are wildlife management areas and that protected bird species and migratory birds are regularly observed within the boundaries of the Town, the applicant must comply with the "Guidelines for Wind Project Ecological Study" by the Maine Department of Environmental Protection and Maine Department of Inland Fisheries and Wildlife.

35.2 Wildlife Protection

35.2.1 The Applicant will demonstrate that the WEF will not have a significant adverse effect on area wildlife and wildlife habitat. Such analysis shall include but not be limited to adverse effects to birds, bats, game animals, and habitat fragmentation. In addition, the Applicant must demonstrate that the WEF will have no significant adverse effect on rare, threatened or endangered wildlife. The wildlife and habitat analysis must include appropriate pre-construction field studies and at least three sets of corresponding post construction field studies conducted at periodic intervals within 3 years after the Wind Turbines become operational. These studies will be conducted by a qualified wildlife biologist hired by the Town of Buckfield and paid for by the Applicant.

35.2.2 If the post-construction field studies demonstrate significant adverse effect to birds, bats, game animals or habitat fragmentation, the Town, the Owner/operator and the Maine Department of Inland Fisheries and Wildlife (MDIFW) shall develop an appropriate mitigation plan. The Owner/operator will be responsible for the full cost of implementing the mitigation plan under the supervision of MDIFW.

35.2.3 Raptor Habitat. To the extent practicable, the creation of artificial habitat for raptors or raptor prey shall be minimized. In making its determination under this subsection

the Planning Board shall consider comments and recommendations, if any, provided by the Maine Department of Inland Fisheries and Wildlife.

35.2.4 Erosion Control. The WEF will be designed, constructed and maintained in accordance with accepted erosion and sedimentation control methods. The acceptability of the proposed methods will be judged utilizing the "Maine Erosion Control Handbook for Construction: Best Management Practices", March 2003 or as revised. Whenever sedimentation is caused by stripping vegetation or grading it shall be the responsibility of the Owner/operator to remove it from all adjoining surfaces, drainage systems and watercourses and to repair any damage at the Owner/operator's expense as quickly as possible.

35.2.5 Groundwater Protection. The WEF will not adversely affect the quality or quantity of groundwater. The Applicant shall have to demonstrate to the Planning Board's satisfaction that there are no unusual risks to the groundwater, including underground rivers, created by the project. The Board may require as a condition of permit approval, 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. If a Wind Turbine foundation is proposed in a bedrock area, a baseline of all wells, springs and certified public water sources within a two-mile radius of the foundation shall be established. If degradation or contamination occurs, permanent remedies shall be the responsibility of the Owner/operator.

35.2.6 Light Pollution. The WEF shall be designed to minimize the amount of nighttime light pollution. The Applicant shall provide a plan showing lighting on and around all Wind Turbines and associated facilities. Lighting on Wind Turbines shall be illuminated to Federal Aviation Administration (FAA) minimal standards using only red rather than white lights, if possible. The minimum number of Wind Turbines will be illuminated, per FAA rules. Lighting shall be shielded from ground view to FAA maximum standards.

35.2.7 Relation to DEP Certification and Permitting. If DEP has issued a Site Location of Development Act permit for a WEF there is a rebuttable presumption that the development meets the requirements of Sub-Sections 35.2.2 and 35.2.3.

If a DEP Site Location of Development permit is required, the Planning Board will require the permit to be issued before the application is deemed complete and may take the recommendations under advisement to determine compliance with Sub-Sections 35.2.2 and 35.2.3.

35.3 Scenic or Special Resource Standards

35.3.1 Except as otherwise provided in this subsection, if a WEF is proposed for a location in, or is visible from, a Scenic or Special Resource, the Applicant shall provide the Planning Board with a visual impact assessment that addresses the evaluation criteria in subsection 35.3.3. There is a rebuttable presumption that a visual impact assessment is not required for those portions of a WEF that are located more than 3 miles, measured horizontally, from a Scenic or Special Resource. The Planning Board may require a visual impact assessment for portions of the WEF located more than 3 miles and up to 8 miles from a Scenic Resource if it finds that a visual impact assessment is needed to determine if there is the potential for significant adverse effects on the Scenic or Special Resource. Any interested Person must submit information intended to rebut the presumption to the Planning Board within 30 days of acceptance of the application as complete. The Planning Board shall determine if the presumption is rebutted based on a preponderance of evidence in the record.

35.3.2 The Planning Board shall determine, based on consideration of the evaluation criteria in sub-section 35.3.3, whether the WEF significantly compromises views from or of a Scenic or Special Resource such that the proposed facility has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of that Scenic or Special Resource.

35.3.3 In making its determination pursuant to sub-section 35.3.2, and in determining whether an Applicant for a WEF located more than 3 miles from a Scenic Resource must provide a visual impact assessment and the Planning Board shall consider:

35.3.3.1 The significance of the potentially affected Scenic or Special Resource;

35.3.3.2 The existing character of the surrounding area;

35.3.3.3 The expectations of the typical viewer;

35.3.3.4 The WEF Project's purpose and the context of the proposed activity;

35.3.3.5 The extent, nature and duration of potentially affected public uses of the Scenic or Special Resource and the potential effect on the public's continued use and enjoyment of the Scenic or Special Resource; and

35.3.3.6 The scope and scale of the potential effect of views of the WEF on the Scenic or Special Resource, including but not limited to issues related to the number and extent of Wind Turbines visible from the Scenic or Special Resource, the distance from the Scenic or Special Resource and the effect of prominent features of the WEF Project on the landscape.

Section 36 - Construction/Design Standards

36.1 General Construction Standards. All Wind Turbines shall be constructed in compliance with Good Utility Practice for Wind Turbines. In the event that, after inspection by a qualified expert in Good Utility Practice, the Town concludes that any of the Wind Turbines were not constructed in compliance with Good Utility Practice or constitutes a danger to persons or property, then upon notice being provided, the Owner/operator shall have 90 days to bring the non-compliant Wind Turbine(s) into compliance with such standards. If 90 days is insufficient time to cure the non-compliance, the Owner/operator shall present a plan to the Town describing the reason for the delay and the time frame for the cure to be put in place.

36.2 Electrical Design Standard. On-site power and transmission lines shall be placed in a manner consistent with Good Utility Practices. Wind Turbines shall be engineered according to Good Utility Practice to prevent transient ground currents and stray voltage. The Applicant shall demonstrate that there will be no significant adverse effect upon the environment or individuals from transient ground currents and stray voltage.
36.3 Transmission Line Standards. The Applicant must, in conjunction with the Maine Public Utility Commission (PUC), prepare a written report documenting all anticipated changes, modifications or upgrades to the public utility grid within the Town of Buckfield due to the WEF. The written report must include necessary approvals from the PUC, proof of leases or required

right of ways for transmission lines, and any alternatives to the final plan considered. The report must document the residual capacity remaining in the local utility grid that is available for use by other local electrical generating projects.

36.4 Geological Stability. Wind Turbines shall not be constructed on areas of geological instability. The Applicant shall demonstrate that this standard is met.

Section 37 - Public Safety and Health Standards

37.1 Fire Protection. The Applicant shall prepare a plan in consultation with the Town of Buckfield fire department as part of the permitting process. The plan shall address all activities at the WEF from the start of construction through the end of power generation and the final removal and restoration of the site, and shall describe a response plan to address all identified potential fire, rescue and hazardous materials scenarios. The Owner/operator shall ensure that the WEF complies with the following control and prevention measures and assumes responsibility for all associated incremental costs:

37.1.1 Use of fireproof or fire resistant building materials and buffers or fire retardant landscaping around WEFs as appropriate.

37.1.2 Incorporation of a self-contained fire protection system to address nacelle fires including but not limited to redundant fire quenching systems in the nacelle.

37.1.3 Maintenance of firebreak areas as appropriate cleared of vegetation and maintained as a fire/fuel break as long as the Wind Turbine is in operation.

37.1.4 Provision for any additional fire fighting or rescue personnel, services, training, materials, or vehicles as may be required to address any emergency related to the WEF that is beyond the current capabilities and duties of the local fire department.

37.2 Hazardous Wastes. The Owner/operator shall be responsible for compliance with all ordinances, state regulations and laws applicable to the generation, storage, cleanup, and disposal of hazardous wastes generated during any phase of the project's life. The Planning Board shall require that a plan be

submitted by the Applicant demonstrating the ability and intent to meet such compliance.

37.3 Blasting. Owner/operator shall not undertake any blasting in connection with the construction of the WEF unless Applicant has notified the Town and submitted a blasting plan consistent with applicable laws and regulations. The plan must be reviewed and approved by the Planning Board before any blasting may take place. No blasting shall be undertaken without 48 hour notification to all residents within a two mile radius, measured horizontally, from the blasting area. All blasting operations will cover the blasting area with blast mats to prevent debris from falling on nearby properties.

Section 38 - Communications and Electromagnetic Interference Standards

38.1 WEFs shall be sited and operated so that they do not interfere with emergency (fire, police/sheriff, ambulance) radio two-way communications (base stations, mobile, and hand held radios, including digital) and/or paging, television, telephone (including cellular and digital), microwave, satellite (dish), navigational, internet or radio reception to neighboring areas. The Owner/operator of the project 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 Wind Turbine, and any and all related transmission lines, transformers, and other components related to the interference.

38.2 The Owner/operator of the WEF shall respond within one day to any request for communications interference investigation by any emergency agency (fire, police/sheriff, ambulance). Testing will commence within two days of the request. The Owner/operator is responsible for mitigating within two days from the determination of interference attributed to the operation of the Wind Turbine.

38.3 The Owner/operator of the WEF shall respond within five business days to any request for communications interference investigation by a property owner or resident within a three-mile radius, measured horizontally, of the WEF. Testing will commence within five business days of the request. The owner/operator is responsible for mitigating within ten business days from the determination of interference attributed to the operation of the Wind Turbine.

Section 39 - Ground Transportation Standards

39.1 The Applicant shall identify all public ways to be used within the Town of Buckfield to transport equipment and parts for construction, operation or maintenance of the Wind Turbines.

39.2 A qualified third party engineer, hired by the Planning Board and paid for by the Applicant, shall document town road conditions prior to construction. The engineer shall document all town road conditions again thirty (30) days after construction is complete or as weather permits. The applicant will provide proof that MDOT has given permission for travel over any State roads

39.3 The Town of Buckfield shall require the applicant to purchase a bond for all town road(s) in compliance within state regulations.

39.4 Any road damage caused by the Applicant or its contractors shall be promptly repaired at the Owner/operators expense.

39.5 The Applicant shall demonstrate that it has appropriate financial insurance to ensure the prompt repair of damaged roads.

39.6 Plan and Risk Assessment for Road and Property Use

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

39.6.1.1 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 WEF, including a description of how and when such ways and property will be used or affected.

39.6.1.2 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.

39.6.1.3 A complete assessment of the proposed use of public ways in the town in connection with the construction of the WEF, including: the adequacy of turning radii; the ability of the public ways to sustain loads without damage; the need to remove or modify (permanently or temporarily) signs, trees, utilities, or anything else; any reasonably foreseeable damage to

public ways or other property, public or private; any reasonably foreseeable costs that the town may incur in connection with the use of property in the town, including but not limited to costs relating to traffic control, public safety, or damage to public ways, or to other public or private property.

39.6.1.4 A traffic control and safety plan relating to the use of public ways in the town in connection with the construction of the WEF.
39.6.1.5 Any additional relevant information that the Planning Board may request relating to the use of public ways or other effects on public and private property that may occur in connection with the construction and operation of the WEF.

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

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

39.9The Applicant shall be responsible for paying for any damage to any public way. If the risk assessment anticipates damage to any public way, the Planning Board may require the Applicant to provide a surety in an amount that the Planning Board determines appropriate to secure any obligation under the agreement, including but not limited to any obligation relating to alterations or modifications to public ways made in connection with the Applicant's activities.

Section 40 - Reporting Requirements:

40.1 Extraordinary Events.. The Owner/operator shall notify the Town of any extraordinary event within 24 hours of that event, "Extraordinary events" shall include but not be limited to tower collapse, catastrophic turbine failure, fires, leakage of hazardous

materials, unauthorized entry to the tower base, thrown blade or hub, any injury to a Facility worker or other person that requires emergency medical treatment, or other event that impacts the public health and safety of the Town or its residents. For the purpose of this section calling 911 is the same as notifying the town. Additionally, the Owner/Operator will provide the Town and its residents with a hotline phone number for reporting of any such extraordinary events to a manned facility on call 24 hours a day, 365 days a year.

40.2 Change of Owner/operator. The Owner/operator will notify the Town of Buckfield of a pending change of ownership in writing 30 days before the effective change. New owners will apply for a transfer of permits to be reviewed by the Town Of Buckfield and will assume all the obligations of the selling Owner/operator.
40.3 Reports from annual safety inspections pursuant to Section 30 and annual proof of liability insurance pursuant to Section 34 & 24.2.33.

Section 41 - Sound Measurement Procedures

41.1 A qualified independent acoustical consultant who is a Full Member of the Institute of Noise Control Engineering (INCE) shall conduct all sound studies. The acoustical consultant shall be hired by and report to the Permitting Authority. The Applicant will pay for the studies.

41.2 The WEF Applicant/Licensee shall provide all technical information and wind farm data required by the qualified independent acoustical consultant before, during, and/or after any acoustical studies required by this document and for acoustical measurements.

41.3 Sound level meters and calibration equipment must comply with the latest version of the American National Standards Institute “American Standard Specifications for General Purpose Sound Level Meters" (ANSI Standard S1.4) and shall have been calibrated at a recognized laboratory within one month prior to the initiation of the study.

41.4 Except as specifically noted otherwise, measurements shall be conducted in compliance with ANSI Standard S12.18-1994 "Outdoor Measurements of Sound Pressure".

41.4.1 Because WEFs operate 24/7 the background sound levels of interest are those during the quieter periods which are often the evening and night. Sounds from the WEF 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 AC 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.

Measurement periods such as at dusk when bird and insect activity is high or the early morning hours when the “dawn chorus” is present are not acceptable measurement times. Longer term sound level averaging tests, such as 24 hours or multiple days are not at all appropriate since the purpose is to define the quiet time background sound level. It is defined by the LA90 and LC90 descriptors. It may be considered as the quietest one (1) minute during a ten (10) minute test. LA90 results are valid only when LA10 results are no more than 10 dB above LA90 for the same period. LC10 less LC90 are not to exceed 10 dB to be valid.

The background noise environment consists of a multitude of distant sources of sound. When a new nearby source is introduced the new background noise level would be increased. The addition of a new source with a noise level 10 dB below the existing background would increase the new background 0.4 dB. If the new source has the same noise level as the existing background then the new background is increased 3.0 dB. Lastly, if the new source is 3.3 dB above the existing background then the new background would have increased 5 dB. For example, to meet the requirement of L90A + 5 dB = 31 dBA if the existing quiet nighttime background sound level is 26 dBA, the maximum wind turbine noise immission contribution independent of the background cannot exceed 29.3 dBA Leq at a dwelling. When adding decibels, a 26 dBA background combined with 29.3 dBA from the turbines (without background) results in 31 dBA. Further, background L90 sound levels documenting the pre-construction baseline conditions should be determined when the ten (10) minute maximum wind speed is less

than 2 m/s (4.5 mph) near ground level/microphone location 1.5 m height.

41.5 Along with information about the make, model, and name plate capacity of all turbines potentially used in the proposed WEF, the applicant will also supply their sound power levels (Lw) for each 1/3 octave band from 6.3 Hz to 10k hz.

41.6 The applicant will also supply a sound propagation model predicting the sound levels immitted into the community computed using at minimum 1/1 octave band sound power levels to compute the LCeq and LAeq levels to generate LAeq and LCeq contours in 5 dB increments overlaying an aerial view and property survey map from the WEF property out to a distance to include all residential property lines within two (2) miles measured horizontally from the Project Boundary.

41.7 Prior to permit application approval, a pre-construction ambient sound level study shall be conducted at any property line out side of the setback area identified by the qualified independent sound engineer.

41.8 The tests shall be conducted using both an A-weighting scale (dBA) and low frequency C-weighting scale (dBC).

41.9 Predictions shall be made at all property lines within and outward for two (2) miles measured horizontally from the Project Boundary for the wind speed, direction and operating mode that would result in the worst case WEF nighttime sound emissions.

41.10 Tests shall be reflective of seasonal changes to vegetation and atmospheric conditions. At a minimum one set of tests should be performed during each of the four (4) calendar seasons of the year.

41.11 All measuring points shall be located in consultation with the property owners and such that no significant obstruction blocks sound and vibration to the site.

41.12 Outdoor sound level measurements must be taken at 6 feet above the ground and at least 15 feet from any reflective surface.

41.13 Duration of measurements shall be a minimum of ten continuous minutes for each criteria at each location.

41.14 Measurements must be made when the wind levels are less than 4.5 mph and with appropriate wind screening for the recording device.

41.15 When conducting their pre-construction sound prediction analysis, the Applicant shall make specific reference to: 1) the unique aspects of the mountainous contours and terrain of the area and its effect on sound predictability and; 2) line source sound predictions (emanating from a line of Wind Turbines) in addition to the traditional single point source predictions.

41.16 Measurements should be obtained during representative weather conditions when the Wind Turbine sound is most noticeable, including periods of temperature inversion most commonly occurring at night.

41.17 Measurements shall be taken at each of the following three time periods:

41.17.1 Day (10 a.m. — 2p.m.)

41.17.2 Evening (7p.m. —11 p.m.)

41.17.3 Night (12 midnight — 4 a.m.)

41.18 Each measurement shall be replicated during the same time period over three different days within the same season for a total of 9 measurements per location per season (e.g., three daytime measurements in the winter, three evening measurements in the winter, and three night time measurements in the winter). The lowest of the three measurements per time period, per season, will be used to determine the pre-construction ambient sound for that time period and season.

41.19 For each measurement the following minimum criteria will be recorded:

41.19.1 Lmax, Leq, L10 and L90 in dBA

41.19.2 Lmax, Leq, L10 and L90 in dBC

41.19.3 A narrative description of any intermittent sounds registered during each measurement.

41.19.4 Wind speed and direction at time of measurement

41.19.5 Description of weather conditions at time of

measurement
41.19.6 Description of topography and contours relative to proposed or actual Wind Turbines

41.20 A comparison of the expected sound levels from the proposed WEF with the sound level limits of this regulation shall be submitted. A written report comparing the expected sound levels with the pre-development ambient sound levels will help determine compliance with the standard.

41.21 A 5 dBA and/or a 5 dBC penalty shall be applied for short duration repetitive sound or repetitive impulse sound. This is a characteristic "thumping" or "whooshing" sometimes exhibited by larger Wind Turbines.

41.22 A 5 dBA penalty shall be applied for tonal sound. This is a single or limited frequency sound (vs. broadband sound) associated with mechanical sound artifacts (i.e. high pitched whining, screeching, buzzing).

41.23 For sites being measured with existing Wind Turbines two sets of measurements are required:
1) one set with the Wind Turbine(s) off and; 2) one set with the Wind Turbine(s) running.

41.24 For noise complaints after the Wind Turbines are operational, the measurement points, season, time, and duration of measurements shall be selected in consultation with the affected property owner. If requested by the property owner, continuous measurements may be taken for longer periods of time to capture intermittent nuisance noise patterns.

41.25 Within twelve months of the date when the project is fully operational, and within four weeks of the anniversary date of the pre-construction background sound measurements, repeat the existing sound environment measurements taken before the project approval. Post-construction sound level measurements shall be taken both with all WEF's running and with all WEF's off.

41.26 The post-construction measurements will be reported to the Town of Buckfield (available for public review) using the same format as used for the preconstruction sound studies. Post-construction sound studies shall be conducted by a qualified independent acoustical engineer contracted by the applicant and paid for by the Owner/operator thru the town to preserve the status of the engineer as a qualified independent consultant, the town will at their discretion have the testing independently

reviewed.
41.27 Any sound level falling between two (2) whole decibels shall be deemed the higher of the two.

41.28 When testing for WEF sound compliance, all measurements at the test location must be the pre-turbine background sound measurement location nearest to the home of the complainant in line with the WEF and nearer to it. The time of day for the testing and the wind farm operating conditions plus wind speed and direction must replicate the conditions that generated the complaint. Procedures of ANSI S12.9-Part 3 apply. The effect of instrumentation limits for wind and other factors must be recognized and followed.

Section 42 - Operational License Requirement

42.1 An Operational License is required for the operation of all WEF. Applications for a WEF Operational License shall be submitted to the Planning Board at least 14 days prior to the regularly scheduled monthly meeting that they will be discussed.

42.1.1 Where an Applicant is applying for a new or amended WEF Permit, the application for a WEF Operating License, or amended license, shall be submitted to the Planning Board in conjunction with the Permit application, and shall include the application form and the separate fee specified in Section 13

42.1.2 Where an Applicant is applying for a WEF Operational License renewal, a new License as the result of transfer of ownership or operation, or reinstatement or modification of an Operational License, the Applicant shall submit an application form, a copy of the existing WEF Permit and the fee specified in Section 13.

42.1.3 An Operational License shall be valid for five years.

42.1.4 The granting of an Operational License is conditional upon the following criteria:

42.1.4.1 Demonstration by the Applicant of compliance with performance standards of the Ordinance.

42.1.4.2 For the initial Operational License, the Wind Turbine Project must successfully pass an inspection for structural and operational integrity conducted by an independent Maine licensed professional engineer

chosen by the Planning Board and paid for by the applicant. The inspection shall be conducted after construction is completed but before operations begin. Success will be demonstrated by submission of a copy of the engineer's inspection report to the Planning Board. If the report specifies that repairs, maintenance or changes to safety procedures are necessary, the owner shall provide the Enforcing Authority with proof that the repairs have been completed, a written schedule for any recommended maintenance, and documentation of any updated safety procedures.

42.1.4.3 For a renewal of an Operational License, where there is no change of Ownership or operator, the inspection procedure and criteria specified in Section 42.1.4.2 shall be completed six months prior to the expiration of the current Operational License at the expense of the applicant.

42.1.5 Applications for Operational License renewals where there is no change of ownership of operator shall be submitted to the Planning Board 6 months prior to their expiration.

42.1.6 An Operational License shall automatically terminate upon transfer of ownership or operation of the WEF. The proposed new owner or operator shall be required to obtain a new Operational License, which must be in place prior to the transfer of ownership or operation of the WEF. The application for renewal of the Operational License in the case of transfer of ownership or operation shall include the following items:

42.1.6.1 The Applicant's name, address and phone number, and the name, address and phone number of the Owner/operator, if different

42.1.6.2 An emergency directory for the Owner/operator sufficient to allow the Town to contact the Owner/operator at any time

42.1.6.3 Evidence of the Applicant's technical and financial ability to operate the WEF in accordance with this Ordinance, any other Town of Buckfield ordinance, and the Operational License

42.1.6.4 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

42.1.6.5 An updated safety plan in accordance with the requirements of Section 32.

42.1.6.6 An updated fire prevention and emergency response plan in accordance with the requirements of Section 37;

42.1.6.7 An updated emergency shutdown plan in accordance with the requirements of Section 44.4;

42.1.6.8 An updated decommissioning and site restoration plan in accordance with the requirements of Section 43;

42.1.6.9 Updated liability insurance information in accordance with the requirements of Section 34;

42.1.6.10 A signed statement from the Applicant that the Applicant agrees to assume full responsibility for complying with the provisions of this Ordinance, including agreeing to continue or complete any duties and obligations of the former Operational License holder under this Ordinance or former Operational License, including, but not limited to, the requirement for post-construction sound measurements, post-construction stray voltage testing, wind turbine inspections, and submission to inspections.

42.1.7 An Operational License shall automatically terminate upon any amendment to a permit.

42.2.8 Failure to comply with the provisions of this Ordinance may result in the suspension or revocation of the Operational License pursuant to Section 44

42.2.9 An Operational License shall be deemed abandoned if the WEF's operation has ceased for twelve consecutive months. An Operational License expires immediately upon abandonment.

Section 43 - Decommissioning Standards

43.1 The Owner/operator shall, at its expense, complete decommissioning of the WEF within: 1) twelve (12) months after the end of the useful life of the WEF, or; 2) as specified in the materials provided at the time of application or; 3) pursuant to remedies described in Section 44.8 . The WEF will be presumed to be at the end of its useful life if no electricity is generated for a continuous period of twelve (12) months.

43.2 Decommissioning shall include removal of wind turbines, towers, buildings, cabling, electrical components, roads, and any other associated facilities that could be reasonably considered to create a hazard unless, at the end of the Wind Turbine or WEF's useful life, as determined in accordance with Section 43.1, the Applicant provides written evidence of plans for continued beneficial use of these components of the WEF, and this evidence is approved by the Planning Board.

43.3 Except as otherwise provided by Section 43.2, disturbed earth shall be graded and re-seeded, unless the Participating Landowner of the affected land requests otherwise in writing.

43.4 The Owner /operator shall post and maintain decommissioning funds in an amount equal to Net Decommissioning Costs; provided that at no point shall decommissioning funds be less than one hundred percent (100%) of Decommissioning Costs. The decommissioning funds shall be posted and maintained with a bonding company or Federal or State-chartered lending institution chosen by the Owner/operator and Participating Landowners posting the financial security, provided that the bonding company or lending institution is authorized to conduct such business within the State and is approved by the Town of Buckfield. No work can begin on the WEF before the decommissioning bond is issued and approved.

43.5 An independent and certified Professional Engineer shall be retained to estimate the total cost of decommissioning without regard to salvage value of the equipment ("Decommissioning Costs"), and the cost of decommissioning including the salvage value of the equipment ("Net Decommissioning Costs"). Said estimates shall be submitted to the Town of Buckfield after the first year of operation and every other year thereafter.

43.6 Decommissioning funds may be in the form of a performance bond, surety bond, letter of credit, or other form of financial

assurance as may be acceptable to the Town of Buckfield.

43.7 If the Owner/operator fails to complete decommissioning within the period prescribed by Section 43.1, then the Participating Landowner shall have an additional six (6) months to complete decommissioning.

43.8 If neither the Owner/operator, nor the Participating Landowner completes decommissioning within the periods prescribed by Sections 43.1 and 43.7 the Wind Turbine or WEF shall be deemed to be in violation of this Ordinance and the Town of Buckfield may take such measures as necessary, including court action, to ensure the completion of decommissioning. The entry into and submission of evidence of a Participating Landowner agreement to the Town of Buckfield shall constitute agreement and consent of the Parties to the agreement, their respective heirs, successors and assigns that the Town of Buckfield may take such action as necessary to implement the decommissioning plan.

43.9 The escrow agent shall release the decommissioning funds when the Owner/operator has demonstrated and the Enforcement Authority concurs that the decommissioning has been satisfactorily completed, or upon written approval of the Town in order to implement the decommissioning plan.

Section 44 - Complaints/ Violations/ Enforcement

44.1 General Standard It shall be unlawful for any person, firm or corporation to violate or fail to comply with or take any action that is contrary to the terms of this Ordinance, or any permit or Operational License issued under this Ordinance, or cause another to violate or fail to comply or take any action which is contrary to the terms of this Ordinance or any permit or Operational License issued under this Ordinance.

44.2 Enforcing Authority the Town of Buckfield Code Enforcement Officer (CEO) will serve as the Enforcing Authority for WEFs. The Enforcing Authority will:

44.2.1 Have the authority to conduct investigations, resolve complaints, ensure compliance with and enforce standards, and levy penalties if required.

44.2.2 Appoint qualified representatives to investigate complaints. The reasonable costs and fees for the qualified representative will be paid by the Owner/operator and may

include engineers, consultants, and other professionals.

44.2.3 Recommend to the Planning Board amendments to this Ordinance deemed necessary to address health or safety concerns not currently addressed in this Ordinance.

44.2.4 Have access to Town legal counsel as required.

44.3 Enforcement. Standards in this Ordinance will be enforced through a series of enforcement options including but not limited to: 1) Emergency shutdown; 2) 5 day response to serious violations with a 10 day mitigation period; 3) 30 day complaint resolution with a 30 day mitigation period; 4) financial penalties; and 5) other remedies.

44.4 Emergencies and Emergency Shutdown
The Owner/operator shall be required to immediately cease operations for the duration of any emergency. Emergency shall mean a proven condition or situation caused by the WEF that presents an imminent physical threat of danger to life or significant threat to property. A WEF 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 professional engineer in good standing prior to resumption of operation. The Town shall have the right to access all Wind Turbines to verify conditions and/or repair progress with reasonable notice to the Wind Turbine owner/operator. Within 24 hours of an occurrence of a tower collapse, turbine failure, property damage or contamination, fires, thrown blade or hub, severely injured Wind Turbine worker or private person as a result specific to being a WEF site, the Owner/operator shall notify the Town of the occurrence and proposed remedial action. For this section calling 911 is considered notifying the town.

44.5 Serious Violations of Standards
The Owner/operator of the WEF shall respond within five business days to any complaint or complaints deemed by the Enforcing Authority to have merit. Testing, paid for by the Owner/operator, will commence within ten working days of the complaint. Except as noted for interference with emergency communications, the Owner/operator is responsible for mitigating the problem within ten business days from the final determination of any cause attributed to the operation of the WEF. Pursuant to Section 38, interference with emergency communications must be responded to in one day and mitigated within 2 days.

44.6 Other Violations

If the Enforcing Authority determines that a violation of the Ordinance or the permit has occurred, and the violation is determined neither to be an emergency pursuant to Section 44.4, nor a serious violation pursuant to Section 44.5 , the Enforcing Authority shall provide written notice to the Owner/operator alleged to be in violation of this Ordinance or permit. The Enforcing Authority and the involved parties shall engage in good faith negotiations to resolve the alleged violation. Such negotiations shall be conducted within thirty (30) days of the written notice of violation. The Owner/operator shall pay for any necessary testing if the Owner/operator is subsequently determined to be in non-compliance. The Owner/operator is responsible for mitigating the problem within 30 days from the final determination of any cause attributed to the operation of the WEF. Mitigation involving significant construction or physical modification may have up to 90 days to be completed pursuant to Section 30.

44.7 Penalties

Any Person or Applicant who fails to comply with any provision of this Ordinance by failing to reach agreement with the Enforcing Authority, or after the expiration of the mitigation periods defined in Section 44.5 and Section 44.6 , shall be fined at least five hundred dollars ($500) but no more than one thousand dollars ($1000) for each WEF. A separate offense shall be deemed to be committed on each day during which a violation occurs or continues to occur.

44.8 Other Remedies

If the Owner/operator has not corrected the violation within the timeframes contained in Section 44.5 or Section 44.6, the Enforcing Authority shall be authorized to institute a civil action to seek a court order to make the WEF cease operation until the WEF can prove compliance with the standards of this Ordinance. At the discretion of the Enforcing Authority, penalties and fines may continue to accrue during this period. If after 6 months of being ordered to cease operations the Owner/operator has not demonstrated good faith and significant effort in resolving the issue, the Enforcing Authority shall seek through a civil action to have the court order the applicant / owner to initiate the decommissioning procedure pursuant to Section 43

.

44.9 Identifying Violations and Registering Complaints

44.9.1 Pursuant to Section 40.1, the Owner/operator will

report to the Town all extraordinary events within 24 hours of their occurrence.

44.9.2 For Wind Turbines the Town will maintain, at the Owner/operator's expense, a system for recording and investigating all complaints related to the WEF. The system must be able to receive complaints 24 hours a day, 365 days a year. A permanent record of all complaints, investigations and outcomes will be maintained. The Owner/operator will designate a representative and method to receive and respond to complaints from the town 24 hours a day, 365 days a year. Complaints for WEFs will be referred to the Code Enforcement Officer in a timely manner.

44.10 Sound Regulations Compliance. A WEF shall be considered in violation of the conditional use permit unless the applicant demonstrates that the project complies with all sound level limits using the procedures specified in this ordinance. Sound levels in excess of the limits established in this ordinance shall be grounds for the Town of Buckfield to order immediate shut down of all non-compliant Wind Turbine units.

44.10.1 A serious noise violation is defined as three (3) verified noise complaints attributed to the operation of a Wind Turbine within a period of one month or less with a measurable sound level greater than 10 dBA above pre-construction ambient sound levels or 50 dBC inside or at an Occupied Building.

44.10.1.1 For serious violations the Owner/operator will respond within five (5) days of the complaint. Testing, if necessary, will be conducted by a qualified independent acoustical engineer contracted by the applicant and paid for by the Owner/operator thru the Town to preserve the status of the engineer as a qualified independent consultant. The Town will at their discretion have the testing independently reviewed. Testing will commence within ten working days of the complaint. Testing will be conducted for a minimum of a one-month period according to the measurement standards and procedures in Sections 26 & 41. The Owner/operator is responsible for mitigating the problem within ten (10) days from a final determination of any cause attributed to the operation of the Wind Turbine. Failure to mitigate the problem will result in the Wind Turbine being declared unsafe and emergency shutdown procedures will be

implemented per Sections 44.4, 44.8 & 44.10.1.

44.10.1.2 Noise violations not determined to be an emergency pursuant to Section 44.4 & 44.10, or not determined to be a serious violation pursuant to Section 44.10.1.1, shall be managed pursuant to Section 44.6. Testing, if necessary, will be paid for by the Owner/operator and hired independently by the Town. Testing will be conducted for an appropriate period of time and conducted according to the measurement standards and procedures set forth in Section 41. The Owner/operator is responsible for mitigating the problem within 30 days from a final determination of any cause attributed to the operation of the WEF. Mitigation involving significant construction or physical modification may have up to 90 days to be completed pursuant to Section 36.

44.11 Shadow Flicker or Blade Reflection Compliance

44.11.1 A serious shadow flicker or blade reflection violation is defined as three (3) days of significant nuisance shadow flicker or blade reflection, in any one month falling on a receptor that, if annualized, will be estimated to be more than 10 hours per year. The predictive annualized calculation shall assume clear weather, but take into account seasonal tracking of the sun. For serious violations the Owner/operator will respond within five (5) days of the complaint. The Owner/operator is responsible for mitigating the problem within ten (10) days from a final determination of any cause attributed to the operation of the WEF. Failure to mitigate the problem will result in the WEF being declared unsafe and emergency shutdown procedures will be implemented per Section 44.4 or 44.8

44.11.1.1 Shadow flicker and blade reflection not determined to be a serious violation pursuant to Section 44.11.1, shall be managed pursuant to Section 44.6. Field verification and modeling, if necessary, will be paid for by the Owner/operator and hired independently by the Town. The Owner/operator is responsible for mitigating the problem within 30 days from a final determination of any cause attributed to the operation of the WEF. Mitigation involving significant construction or physical modification may have up to 90 days to be completed pursuant to Section 36.

Section 45 - Definitions

Aerodynamic Sound — a sound that is caused by the flow of air over and past the blades of a WEF.

Ambient Sound — ambient sound encompasses all sound present in a given environment, being usually a composite of sounds from many sources near and far. It includes intermittent sound events, such as, from aircraft flying over, dogs barking, wind gusts, mobile farm or construction machinery, and the occasional vehicle traveling along a nearby road. The ambient sound also includes insect and other nearby sounds from birds and animals or people. The nearby and transient events are part of the ambient sound environment but are not to be considered part of the long-term background sound.

American National Standards Institute (ANSI) — is a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States. The organization also coordinates U.S. standards with international standards so that American products can be used worldwide. For example, standards make sure that people who own cameras can find the film they need for that camera anywhere around the globe.

Anemometer — a device for measuring the speed and direction of the wind.

Applicant — the legal entity, which includes an individual or business entity and their successors and assigns that seeks to secure a Permit or Operating License under this Ordinance.

A-Weighted Sound Level (dBA) — a measure of over-all sound pressure level designed to reflect the response of the human ear, which does not respond equally to all frequencies. It is used to describe sound in a manner representative of the human ear's response. It reduces the effects of the low with respect to the frequencies centered around 1000 Hz. The resultant sound level is said to be "A-weighted" and the units are "dBA". Sound level meters have an A-weighting network for measuring A-weighted sound levels (dBA) meeting the characteristics and weighting specified in ANSI Specifications for Integrating Averaging Sound Level Meters, S1.43-1997 for Type 1 instruments, and be capable of accurate readings (corrections for internal sound and microphone response permitted) at 20 dBA or lower. In this document dBA means LAeq unless specified otherwise.

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.

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 17 rpm would have a BPF of 1.4 Hz. [E.g. ((3 blades times 17rpm)/60 seconds per minute = 1.4 Hz BPF)]

Blade Reflection — the intermittent reflection of the sun off the surface of the blades of a Wind Turbine.

C-Weighted Sound Level (dBC) — similar in concept to the A-Weighted sound Level (dBA) but C-weighting does not de-emphasize the frequencies below 1k Hz as A-weighting does. It is used for measurements that must include the contribution of low frequencies in a single number representing the entire frequency spectrum. Sound level meters have a C-weighting network for measuring C-weighted sound levels (dBC) meeting the characteristics and weighting specified in ANSI S1.43-1997 Specifications for Integrating Averaging Sound Level Meters for Type 1 instruments. In this document dBC means LCeq unless specified otherwise.

Decibel (dB) — a dimensionless unit which denotes the ratio between two quantities that are proportional to power, energy or intensity. One of these quantities is a designated reference by which all other quantities of identical units are divided. The sound pressure level (Lp) in decibels is equal to 10 times the logarithm (to the base 10) of the ratio between the pressure squared divided by the reference pressure squared. The reference pressure used in acoustics is 20 MicroPascals.

DEP Certification — a certification issued by the Department of Environmental Protection pursuant to Title 35-A M.R.S.A. §3456 for a WEF that is subject to this Ordinance.

Emission — sound energy that is emitted by a sound source (WEF) is transmitted to a receiver (dwelling) where it is immitted (see "immission).

Enforcing Authority — the Code Enforcement Officer (CEO) designated by the Town of Buckfield. The CEO is responsible for

enforcing the standards of this Ordinance after a permit is granted to a WEF.

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.

Good Utility Practice — any of the practices, methods and acts with respect to the safe operation of the Wind Turbine or WEF engaged in or approved by a significant portion of the electric utility industry and, in particular, those portions of the industry with experience in the construction, operation and maintenance of wind turbines during the relevant period; or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability and safety.

Height — the total distance measured from the grade of the property as existed prior to the construction of the wind energy system, facility, tower, turbine or related facility at the base to its highest point. (See Turbine Height definition below)

Hertz (Hz) — frequency of sound expressed by cycles per second.

Horizontal Measurement — distance between two points in relation to the horizon.

Ice Throw — accumulated ice buildup on the blades of a Wind Turbine that is or can be thrown during normal spinning or rotation.

Immediate Family — Spouse, Mother, Father, Brother, Sister, Mother In-law, Father In-law, Brother In-law, Sister In-law also includes all steps and halves.

Immission — sound immitted at a receiver (dwelling) is transmitted from sound source (WEF) that emitted sound energy (see "emission").

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. The C-weighted sound level is defined as the LCeq measured during the operation of the wind turbine operated so as to result in its highest sound output.

Infra-Sound — sound with energy in the frequency range of 0-20 Hz is

considered to be infra-sound. It is normally considered to not be audible for most people unless in relatively high amplitude. However, there is a wide range between the most sensitive and least sensitive people to perception of sound and perception is not limited to stimulus of the auditory senses. The most significant exterior sound induced dwelling vibration occurs in the frequency range between 5 Hz and 50 Hz. Moreover, levels below the threshold of audibility can still cause measurable resonances inside dwelling interiors.
LAeq — a pressure level measurement parameter Full form LAeq is "Equivalent to continous A-weighted sound pressure level".

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

Measurement Point (MP) — location where sound measurements are taken such that no significant obstruction blocks sound from the site. The Measurement Point should be located so as to not be near large objects such as buildings and in the line-of-sight to the nearest turbines. Proximity to large buildings or other structures should be twice the largest dimension of the structure, if possible. Measurement Points should be at quiet locations remote from street lights, transformers, street traffic, flowing water and other local sound sources.

Measurement of Wind Speed — is the speed of wind, the movement of air or other gases in an atmosphere. It is a scalar quantity, the magnitude of the vector of motion. Wind speed Measurment is found using an Anemometer.

Mechanical Noise — sound produced as a byproduct of the operation of the mechanical components of a WEF(s) such as the gearbox, generator and transformers.

Meteorological Tower (MET Tower) — a meteorological tower used for the measurement of wind speed.

Mitigation Waiver — a legally enforceable, written agreement between the Applicant and a Non-participating Landowner in which the landowner waives certain setback, sound or other protections afforded in the Ordinance.

Nacelle — the frame and housing at the top of the tower that encloses the gearbox and generator.

Nameplate Capacity — the electrical power rating of an individual wind turbine as certified by the manufacturer and normally expressed in watts, kilowatts (kW), or megawatts (mW)

Noise — any unwanted sound. Not all noise needs to be excessively loud to represent an annoyance or interference.

Non-participating Landowner — any landowner other than a Participating Landowner.

Notification Area — the entire land base within two (2) miles, measured horizontally from the Project Boundary. All landowners with any part of their property within the notification area or residents living within the notification area must be notified as specified in the Ordinance.

Occupied Building — any structure that is, or is likely to 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 — a license or a license renewal issued by the Planning Board to operate a WEF in accordance with this Ordinance.

Owner/operator — the person or entity with legal ownership of the WEF, including successors and assigns, that has the authority and responsibility to operate the WEF on a day-to-day basis. An Owner/operator must have the legal authority to represent and bind.

Participating Landowner — one or more persons that hold title in fee to the property on which the WEF is proposed to be located pursuant to an agreement with the development Owner/operator.

Permitting Authority — the Planning Board, designated as responsible for conducting the review of WEF applications.

Person — an individual, corporation, partnership, firm, organization or other legal entity.

Project Boundary — represented on a plot plan view by a continuous line encompassing all WEF(s) and related equipment associated with the WEF project.

Property Line — the recognized and mapped property parcel boundary line.

Qualified Independent Acoustical Consultant — qualifications for persons conducting baseline and other measurements and reviews related to the application for a WEF or for enforcement actions against an operating WEF include, at a minimum, full membership in the Institute of Noise Control Engineers (INCE). The Independent

Qualified Acoustical Consultant can have no financial or other connection to a WEF developer or related company.

Scenic or Special Resource — a scenic resource of state or national significance, as defined in Title 35-A M.R.S.A. §3451(9), any site registered in the National Registry of Historic Places or a scenic or special resource of local significance identified as such.

Sensitive Receptor — places or structures intended for human habitation, whether inhabited or not, public parks, state and federal wildlife areas, the manicured areas of recreational establishments designed for public use, including but not limited to golf courses, campgrounds and other nonagricultural state or federal licensed businesses. These areas are more likely to be sensitive to the exposure of the sound, shadow or flicker, etc. generated by a WEF. These areas include, but are not limited to, schools, daycare centers, elder care facilities, hospitals, places of seated assemblage, non-agricultural businesses and residences.

Setback — the minimal allowable horizontal distance as measured from the Project Boundary to a defined point (e.g. a property line or a road).

Setback Area — the entire land base that falls within a specified setback.

Setback Distance — the larger of one mile or 13 times the Turbine Height, measured horizontally from the Project Boundary to the nearest property line.

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

Shadow Flicker Receptor — any Occupied Building on a Non-participating Landowner's property plus an additional 100 foot boundary surrounding the exterior of the Occupied Building, the entire outdoor public area surrounding schools, churches and public buildings, and public roads with a posted speed limit greater than 25 mph.

Sight Line Representation — a line depicted in profile extending from an observer's eye to the lowest point of a viewed tower.

Sound — a fluctuation of air pressure which is propagated as a wave through air.

Sound Power — the total sound energy radiated by a source per unit time. The unit of measurement is the watt. Abbreviated as Lw. This information is determined for the WEF manufacturer under laboratory

conditions specified by IEC 61400-11 and provided to the local developer for use in computer model construction.

Sound Pressure — the instantaneous difference between the actual pressure produced by a sound wave and the average or barometric pressure at a given point in space.

Sound Pressure Level (SPL) — 20 times the logarithm, to the base 10, of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micronewtons per square meter. In equation form, sound pressure level in units of decibels is expressed as SPL (dB) = 20 log p/pr.

Spectrum — the description of a sound wave's resolution into its components of frequency and amplitude.

Statistical Noise Levels — sounds that vary in level over time, such as road traffic noise and most community noise, are commonly described in terms of the statistical exceedance levels LNA, where LNA is the A-weighted sound level exceeded for N% of a given measurement period. For example, L10 is the sound level exceeded for 10% of the time. Of particular relevance, are: LA10 and LC10 the sound level exceeded for 10% of the ten (10) minute interval. This is commonly referred to as the average maximum sound level. LA90 and LC90 are the A-weighted and C-weighted sound levels exceeded for 90% of the ten (10) minute sample period. The L90 sound level is defined by ANSI as the long-term background sound level (i.e. the sounds one hears in the absence of the sound source under consideration and without short term or near-by sounds from other sources), or simply the "background level." Leq is the A or C-weighted equivalent sound level (the "average" sound level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound.

Structure — the total footprint of all of the physical attributes of the entire WEF as defined in Title 38 M.R.S.A. § 482.

Tonal Sound, Tonality or Tonal Audibility — . A sound for which the sound pressure is a simple sinusoidal function of the time, and characterized by its singleness of pitch. Tonal sound can be simple or complex.

Tower — the freestanding structure on which the wind measuring or energy conversion system is mounted.

Turbine Height — the distance measured from the surface of the tower foundation to the highest point of any turbine rotor blade measured at

the highest arc of the blade.
Wind Energy Facility (WEF) — equipment that converts and then transfers energy from the wind into usable forms of electrical energy. and includes all related and supporting items including but not limited to all buildings, structures, electrical equipment, substations, transmission lines, access roads, parking lots, areas to be stripped or graded and areas to be landscaped or screened.

Wind Turbine — a wind energy conversion system that converts wind energy into electricity through the use of a WEF, and includes the nacelle, rotor, tower and pad transformer if any.

Appendix A

TOWN OF BUCKFIELD
PRE-APPLICATION FORM FOR WIND ENERGY FACILITY

SECTION I - APPLICANT INFORMATION

1. Name of Property Owner:_____
   Address:_____
   Telephone Number:_____ Fax Number:_____
   Email Address:_____

2. Name of Applicant (if other than owner):_____
   Address:_____
   Telephone Number:_____ Fax Number:_____
   Email Address:_____

3. If applicant is a corporation, state whether the corporation is licensed to do business in Maine. Yes_____ No_____ If yes, attach a copy of evidence from the Secretary of State's office.

4. Name of Applicant's authorized Representative: _____

5. Name, address, and number of Registered Professional Engineer:
   _____
   _____

6. Address to which all correspondence from the Planning Board should be sent:
   _____
   _____

7. What interest does the applicant have in the parcel to be developed? (e.g. option to purchase, land purchase contract, lease, joint ownership, fee ownership, etc.)
   _____

8. Does the applicant have an interest in any property abutting the parcel to be developed? If so, please state the nature of the interest (as above).

   _____
   _____

SECTION II - INFORMATION ON PARCEL TO BE DEVELOPED

1. Physical Location of Property: _____

2. Deed Reference(s) (from Registry of Deeds): Book_____ Page_____

   Book_____ Page_____

3. Location of Property (from Assessor's Office):
   Map #_____Block # _____Parcel # _____

3. Current zoning of property (Shoreland, Floodplain, or none): _____

4. Acreage of parcel to be developed:_____

5. Please include with this application form a copy of the tax map showing all properties that will fall within the one mile setback area and their owners. Indicate the nature of any easements that will be needed from any abutters:
   _____
   _____
   _____

SECTION III – INFORMATION ON WIND ENERGY FACILITY

1. Proposed name of development:_____

2. Number of turbines:_____

3. Name Plate Capacity of each turbine:_____

4. Anticipated date of construction: _____

5. Anticipated date of completion: _____

6. Does this development require extension of the public infrastructure? ____Yes ___No
   (If yes, check any/all of the categories below that apply.)

   _____Roads
   _____Storm drainage
   _____Water lines
   _____Fire protection equipment
   _____Other (describe) _____
   _____Other (describe) _____

7. Does the applicant propose to dedicate to the public any streets, recreational areas, or common lands?

Street(s)	_____ Yes	_____ No	Estimated Length _____
Recreational Area(s)	_____ Yes	_____ No	Estimated Acreage _____
Common Land(s)	_____ Yes	_____ No	Estimated Acreage _____

8. Is the applicant aware of state and local erosion and sedimentation control laws and standards and does he/she understand the requirement to control storm water run-off from the proposed development? _____Yes _____No

9. Include a detailed depiction of the location of the Wind Energy Facility to include all associated equipment, turbine location, access roads, and buildings within one mile of the facility.

To the best of my knowledge, all information submitted on and with this application is true and correct.

_____ _____

Signature of Applicant Date

Appendix B

Buckfield Planning Board
Site Visit Checklist

This checklist is intended for use by the Planning Board during the preliminary visit to the proposed wind energy facility site. The information gathered here may be incomplete. The data may be refined, revised or amended as the application process proceeds.

Name of Owner_____

Name of Applicant (if different)_____

Location of Site Vist_____
Map # Lot # Parcel #

Date of Site Visit_____ Contour Interval specified by Board_____

List of Persons Present During the Site Walk
_____
_____
_____

Condition of Existing Access Road:

Road Type: State Town Private Gravel Paved

Description: Width _____ Speed Limit _____

Condition: Excellent Good Fair Poor

Best Management Practices: yes no

Existing Traffic Load: Light Moderate Heavy Variable (explain)
_____

Curb Cuts: # of existing curb cuts _____ # of proposed curb cuts _____

Line of Sight for Proposed Cuts: _____ _____ (speed limit X 10 required)

Comments on Access Road:

_____
_____
_____
_____
_____

<u>Existing Conditions of Areas to be Developed</u>:

Steep Slope(s) _____

_____

Wet Area(s) _____ _____

Wetland(s) _____ _____

Stream(s) _____ _____

Drainage Area(s) _____ _____

Historic Feature(s) _____ _____

Cemetery/ies _____ _____

Archeological Feature(s) _____ _____

Soil Type(s) (if known) _____ _____

Exposed Ledge(s) _____ _____

Other Geologic Feature(s) _____ _____

Soil Erosion _____ _____

Buffer Areas _____ _____

Wildlife Habitat _____ _____

Area(s) to be Preserved _____ _____

Other Feature(s) _____ _____

Prior Use/Historical Use

Additional Comments:

Appendix C

NOTICE
WIND ENERGY FACILITY
APPLICATION & SITE VISIT

Month Date, Year

XXXXXXXXXXX
XXXXXXXXXXXXXXXXX
XXXXXXX, ME 04XXX

Dear XXXXXXXXX:
Where you are within the notification area of a proposed Wind Energy Facility, proposed to be located on Tax Map XXX-XXX-XXX, please accept this letter as notice that an application to develop has been received and a Site Visit has been scheduled for the Planning Board:

Day, Month Date, Year
TIME
Location to meet for Site Visit

The purpose of the Site Visit is to provide the Planning Board with information, which will assist them in the Wind Energy Facility approval process.

Should you have any questions, please feel free to contact me.

Sincerely,

XXXXXXXXXXXXX
Chairman
Buckfield Planning Board

Appendix D

NOTICE
WIND ENERGY FACILITY
PUBLIC HEARING

Month Date, Year

XXXXXXXXXXX
XXXXXXXXXXXXXXXXX
XXXXXXX, ME 04XXX

Dear XXXXXXXXX:
Where you either are a resident of or a property owner within the Town of Buckfield, please accept this letter as notice that an application to develop a Wind Energy Facility has been received and found to be complete by the Buckfield Planning Board and a Public Hearing has been scheduled to receive public comment:

Day, Month Date, Year
TIME
Location of meeting

The purpose of the Public Hearing is to provide the Planning Board with information, which will assist them in the Wind Energy Facility approval process.

Should you have any questions, please feel free to contact me.

Sincerely,

XXXXXXXXXXXXX
Chairman
Buckfield Planning Board

Appendix E

Application Fee: $100.00
(This fee is simply an application fee the revenue from which will placed in the miscellaneous administrative revenue account)

Permit Fee: $500.00 per turbine
(This fee is deposited into a general ledger account and used to offset general office expenses attributed to the WEF permit process)

License Fee: $250.00
(This fee is simply an application fee the revenue from which will placed in the miscellaneous administrative revenue account)

License renewal fee: $100.00

(This fee is simply an application fee the revenue from which will placed in the miscellaneous administrative revenue account)

As revised by the Board of Selectmen at a meeting duly called on _____

Selectman 1

Selectman 2

Selectman 3