

**ENERGY FACILITY SITING COUNCIL  
OF THE  
STATE OF OREGON**

**Site Certificate  
for the  
Montague Wind Power Facility**

September 10, 2010

**The Oregon Energy Facility Siting Council**  
**SITE CERTIFICATE**  
**FOR THE MONTAGUE WIND POWER FACILITY**

**I. INTRODUCTION**

The Oregon Energy Facility Siting Council (Council) issues this site certificate for the Montague Wind Power Facility (the facility) in the manner authorized under ORS Chapter 469. This site certificate is a binding agreement between the State of Oregon (State), acting through the Council, and Montague Wind Power Facility LLC (certificate holder) authorizing the certificate holder to construct and operate the facility in Gilliam County, Oregon.

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the Council's *Final Order on the Application for the Montague Wind Power Facility* issued on September 10, 2010. In interpreting this site certificate, any ambiguity will be clarified by reference to the *Final Order on the Application for the Montague Wind Power Facility*.

The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this site certificate, except where otherwise stated or where the context clearly indicates otherwise.

**II. SITE CERTIFICATION**

1. To the extent authorized by state law and subject to the conditions set forth herein, the State authorizes the certificate holder to construct, operate and retire a wind energy facility, together with certain related or supporting facilities, at the site in Gilliam County, Oregon, as described in Section III of this site certificate. ORS 469.401(1).
2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in effect on the date that termination is sought or until the site certificate is revoked under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS 469.401(1).
3. This site certificate does not address, and is not binding with respect to, matters that were not addressed in the Council's *Final Order on the Application for the Montague Wind Power Facility*. Such matters include, but are not limited to: building code compliance, wage, hour and other labor regulations, local government fees and charges and other design or operational issues that do not relate to siting the facility (ORS 469.401(4)) and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council. 469.503(3).
4. Both the State and the certificate holder shall abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. ORS 469.401(2). In addition, upon a clear showing of a significant threat to public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).
5. For a permit, license or other approval addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to

1 the extent that such compliance is required under the respective state agency statutes and  
2 rules. ORS 469.401(2).

- 3 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities and  
4 political subdivisions in Oregon as to the approval of the site and the construction, operation  
5 and retirement of the facility as to matters that are addressed in and governed by this site  
6 certificate. ORS 469.401(3).
- 7 7. Each affected state agency, county, city and political subdivision in Oregon with authority to  
8 issue a permit, license or other approval addressed in or governed by this site certificate shall,  
9 upon submission of the proper application and payment of the proper fees, but without  
10 hearings or other proceedings, issue such permit, license or other approval subject only to  
11 conditions set forth in this site certificate. ORS 469.401(3).
- 12 8. After issuance of this site certificate, each state agency or local government agency that  
13 issues a permit, license or other approval for the facility shall continue to exercise  
14 enforcement authority over such permit, license or other approval. ORS 469.401(3).
- 15 9. After issuance of this site certificate, the Council shall have continuing authority over the site  
16 and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or  
17 request another state agency or local government to inspect, the site at any time in order to  
18 ensure that the facility is being operated consistently with the terms and conditions of this  
19 site certificate. ORS 469.430.

### III. DESCRIPTION

#### 1. The Facility

##### (a) The Energy Facility

20 The energy facility is an electric power generating plant with an average electric  
21 generating capacity of up to 134.7 megawatts and a peak generating capacity of not more than  
22 404 megawatts that produces power from wind energy. The facility consists of not more than 269  
23 wind turbines. The maximum peak generating capacity of each turbine is not more than 3.0  
24 megawatts. The energy facility is described further in the *Final Order on the Application for the*  
25 *Montague Wind Power Facility*.

##### (b) Related or Supporting Facilities

26 The facility includes the following related or supporting facilities described below and in  
27 greater detail in the *Final Order on the Application for the Montague Wind Power Facility*:

- 28 • Power collection system
- 29 • Control system
- 30 • Substations and 230-kV transmission lines
- 31 • Meteorological towers
- 32 • Operations and maintenance facilities
- 33 • Access roads
- 34 • Public roadway modifications
- 35 • Temporary construction areas

1       **Power Collection System**

2           A power collection system operating at 34.5 kilovolts (kV) transports power from each  
3 turbine to a collector substation. To the extent practicable, the collection system is installed  
4 underground at a depth of at least three feet. Not more than 27 miles of the collector system is  
5 installed aboveground.

6       **Control System**

7           A fiber optic communications network links the wind turbines to a central computer at  
8 the O&M buildings. A Supervisory, Control and Data Acquisition (SCADA) system collects  
9 operating and performance data from each wind turbine and from the project as a whole and  
10 allows remote operation of the wind turbines.

11       **Substations and 230-kV Transmission Lines**

12           The facility includes two collector substations. An aboveground, single-circuit 230-kV  
13 transmission line connects the western substation to the central substation. An aboveground,  
14 single-circuit 230-kV transmission line connects the central substation to the 500-kV Slatt-  
15 Buckley transmission line owned by the Bonneville Power Administration (BPA) at the Slatt  
16 substation.

17       **Meteorological Towers**

18           The facility includes up to eight permanent meteorological towers.

19       **Operations and Maintenance Facilities**

20           The facility includes one or two operations and maintenance (O&M) facilities. An on-site  
21 well at each O&M facility supplies water for use during facility operation. Sewage is discharged  
22 to an on-site septic system.

23       **Access Roads**

24           The facility includes access roads to provide access to the turbine strings.

25       **Public Roadway Modifications**

26           The certificate holder may construct improvements to existing state and county public  
27 roads that are necessary for construction of the facility. These modifications would be confined  
28 to the existing road rights-of-way and would be undertaken with the approval of the Gilliam  
29 County Road Department or the Oregon Department of Transportation, depending on the  
30 location of the improvement.

31       **Temporary Construction Areas**

32           During construction, the facility includes temporary laydown areas used to stage  
33 construction and store supplies and equipment. Construction crane paths are used to move  
34 construction cranes between turbine strings.

35       **2. Location of the Proposed Facility**

36           The facility is located south of Arlington, in Gilliam County, Oregon. The facility is  
located on private land subject to easements or lease agreements with landowners.

#### IV. CONDITIONS REQUIRED BY COUNCIL RULES

This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be read together with the specific facility conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions the definitions in OAR 345-001-0010 apply.

The obligation of the certificate holder to report information to the Department or the Council under the conditions listed in this section and in Section V is subject to the provisions of ORS 192.502 *et seq.* and ORS 469.560. To the extent permitted by law, the Department and the Council will not publicly disclose information that may be exempt from public disclosure if the certificate holder has clearly labeled such information and stated the basis for the exemption at the time of submitting the information to the Department or the Council. If the Council or the Department receives a request for the disclosure of the information, the Council or the Department, as appropriate, will make a reasonable attempt to notify the certificate holder and will refer the matter to the Attorney General for a determination of whether the exemption is applicable, pursuant to ORS 192.450.

In addition to these conditions, the site certificate holder is subject to all conditions and requirements contained in the rules of the Council and in local ordinances and state law in effect on the date the certificate is executed. Under ORS 469.401(2), upon a clear showing of a significant threat to the public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules.

The Council recognizes that many specific tasks related to the design, construction, operation and retirement of the facility will be undertaken by the certificate holder's agents or contractors. Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site certificate.

1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate except as provided for in OAR Chapter 345, Division 27.

2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site to the Department of Energy within 90 days after beginning operation of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identifies the outer boundaries that contain all parts of the facility.

3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire the facility:

(a) Substantially as described in the site certificate;

(b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and

(c) In compliance with all applicable permit requirements of other state agencies.

4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of the facility by the dates specified in the site certificate. (*See Conditions 24 and 25.*)

5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For wind energy facilities, transmission lines or pipelines, if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and:

(a) The certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of the transmission line or pipeline occurs during the certificate holder's negotiations to acquire construction rights on another part of the site; or

(b) The certificate holder would construct and operate part of a wind energy facility on that part of the site even if other parts of the facility were modified by amendment of the site certificate or were not built.

6 OAR 345-027-0020(6): If the Council requires mitigation based on an affirmative finding under any standards of Division 22 or Division 24 of this chapter, the certificate holder shall consult with affected state agencies and local governments designated by the Council and shall develop specific mitigation plans consistent with Council findings under the relevant standards. The certificate holder must submit the mitigation plans to the Department and receive Department approval before beginning construction or, as appropriate, operation of the facility.

7 OAR 345-027-0020(7): The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.

8 OAR 345-027-0020(8): Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit, in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility. (*See Condition 32.*)

9 OAR 345-027-0020(9): The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council's approval in the site certificate of an estimated amount required to restore the site.

10 OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all representations in the site certificate application and supporting record the Council deems to be binding commitments made by the applicant.

- 1 11 OAR 345-027-0020(11): Upon completion of construction, the certificate holder shall  
2 restore vegetation to the extent practicable and shall landscape all areas disturbed by  
3 construction in a manner compatible with the surroundings and proposed use. Upon  
4 completion of construction, the certificate holder shall remove all temporary structures not  
5 required for facility operation and dispose of all timber, brush, refuse and flammable or  
6 combustible material resulting from clearing of land and construction of the facility.
- 7 12 OAR 345-027-0020(12): The certificate holder shall design, engineer and construct the  
8 facility to avoid dangers to human safety presented by seismic hazards affecting the site that  
9 are expected to result from all maximum probable seismic events. As used in this rule  
10 "seismic hazard" includes ground shaking, landslide, liquefaction, lateral spreading,  
11 tsunami inundation, fault displacement and subsidence.
- 12 13 OAR 345-027-0020(13): The certificate holder shall notify the Department, the State  
13 Building Codes Division and the Department of Geology and Mineral Industries promptly  
14 if site investigations or trenching reveal that conditions in the foundation rocks differ  
15 significantly from those described in the application for a site certificate. After the  
16 Department receives the notice, the Council may require the certificate holder to consult  
17 with the Department of Geology and Mineral Industries and the Building Codes Division  
18 and to propose mitigation actions.
- 19 14 OAR 345-027-0020(14): The certificate holder shall notify the Department, the State  
20 Building Codes Division and the Department of Geology and Mineral Industries promptly  
21 if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity  
22 of the site.
- 23 15 OAR 345-027-0020(15): Before any transfer of ownership of the facility or ownership of  
24 the site certificate holder, the certificate holder shall inform the Department of the proposed  
25 new owners. The requirements of OAR 345-027-0100 apply to any transfer of ownership  
26 that requires a transfer of the site certificate.
- 27 16 OAR 345-027-0020(16): If the Council finds that the certificate holder has permanently  
28 ceased construction or operation of the facility without retiring the facility according to a  
29 final retirement plan approved by the Council, as described in OAR 345-027-0110, the  
30 Council shall notify the certificate holder and request that the certificate holder submit a  
31 proposed final retirement plan to the Department within a reasonable time not to exceed 90  
32 days. If the certificate holder does not submit a proposed final retirement plan by the  
33 specified date, the Council may direct the Department to prepare a proposed final  
34 retirement plan for the Council's approval. Upon the Council's approval of the final  
35 retirement plan, the Council may draw on the bond or letter of credit described in OAR  
36 345-027-0020(8) to restore the site to a useful, non-hazardous condition according to the  
37 final retirement plan, in addition to any penalties the Council may impose under OAR  
38 Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay  
39 the actual cost of retirement, the certificate holder shall pay any additional cost necessary to  
40 restore the site to a useful, non-hazardous condition. After completion of site restoration,  
41 the Council shall issue an order to terminate the site certificate if the Council finds that the  
42 facility has been retired according to the approved final retirement plan.
- 43 17 OAR 345-027-0023(4): If the facility includes any transmission line under Council  
44 jurisdiction:

(a) The certificate holder shall design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code (American National Standards Institute, Section C2, 1997 Edition); and

(b) The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line.

18 OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a pipeline or transmission line, the Council shall specify an approved corridor in the site certificate and shall allow the certificate holder to construct the pipeline or transmission line anywhere within the corridor, subject to the conditions of the site certificate. If the applicant has analyzed more than one corridor in its application for a site certificate, the Council may, subject to the Council's standards, approve more than one corridor.

19 OAR 345-027-0028: The following general monitoring conditions apply:

(a) The certificate holder shall consult with affected state agencies, local governments and tribes and shall develop specific monitoring programs for impacts to resources protected by the standards of divisions 22 and 24 of OAR Chapter 345 and resources addressed by applicable statutes, administrative rules and local ordinances. The certificate holder must submit the monitoring programs to the Department of Energy and receive Department approval before beginning construction or, as appropriate, operation of the facility.

(b) The certificate holder shall implement the approved monitoring programs described in OAR 345-027-0028(1) and monitoring programs required by permitting agencies and local governments.

(c) For each monitoring program described in OAR 345-027-0028(1) and (2), the certificate holder shall have quality assurance measures approved by the Department before beginning construction or, as appropriate, before beginning commercial operation.

(d) If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.

20 OAR 345-026-0048: Following receipt of the site certificate or an amended site certificate, the certificate holder shall implement a plan that verifies compliance with all site certificate terms and conditions and applicable statutes and rules. As a part of the compliance plan, to verify compliance with the requirement to begin construction by the date specified in the site certificate, the certificate holder shall report promptly to the Department of Energy when construction begins. Construction is defined in OAR 345-001-0010. In reporting the beginning of construction, the certificate holder shall describe all work on the site performed before beginning construction, including work performed before the Council issued the site certificate, and shall state the cost of that work. For the purpose of this exhibit, "work on the site" means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the site or corridor. The certificate holder shall document the compliance plan and maintain it for inspection by the Department or the Council.



21 OAR 345-026-0080: The certificate holder shall report according to the following  
2 requirements:

3 (a) General reporting obligation for energy facilities under construction or operating:

4 (i) Within six months after beginning construction, and every six months thereafter  
5 during construction of the energy facility and related or supporting facilities, the certificate  
6 holder shall submit a semiannual construction progress report to the Department of Energy.  
7 In each construction progress report, the certificate holder shall describe any significant  
8 changes to major milestones for construction. The certificate holder shall include such  
9 information related to construction as specified in the site certificate. When the reporting  
10 date coincides, the certificate holder may include the construction progress report within the  
11 annual report described in OAR 345-026-0080.

12 (ii) By April 30 of each year after beginning construction, the certificate holder shall  
13 submit an annual report to the Department addressing the subjects listed in OAR 345-026-  
14 0080. The Council Secretary and the certificate holder may, by mutual agreement, change  
15 the reporting date.

16 (iii) To the extent that information required by OAR 345-026-0080 is contained in  
17 reports the certificate holder submits to other state, federal or local agencies, the certificate  
18 holder may submit excerpts from such other reports to satisfy this rule. The Council  
19 reserves the right to request full copies of such excerpted reports.

20 (b) In the annual report, the certificate holder shall include the following information for  
21 the calendar year preceding the date of the report:

22 (i) Facility Status: An overview of site conditions, the status of facilities under  
23 construction, and a summary of the operating experience of facilities that are in operation.  
24 In this section of the annual report, the certificate holder shall describe any unusual events,  
25 such as earthquakes, extraordinary windstorms, major accidents or the like that occurred  
26 during the year and that had a significant adverse impact on the facility.

27 (ii) Reliability and Efficiency of Power Production: For electric power plants, the  
28 plant availability and capacity factors for the reporting year. The certificate holder shall  
29 describe any equipment failures or plant breakdowns that had a significant impact on those  
30 factors and shall describe any actions taken to prevent the recurrence of such problems.

31 (iii) Fuel Use: For thermal power plants:

32 (A) The efficiency with which the power plant converts fuel into electric energy. If  
33 the fuel chargeable to power heat rate was evaluated when the facility was sited, the  
34 certificate holder shall calculate efficiency using the same formula and assumptions, but  
35 using actual data; and

36 (B) The facility's annual hours of operation by fuel type and, every five years after  
37 beginning operation, a summary of the annual hours of operation by fuel type as described in  
38 OAR 345-024-0590(5).

39 (iv) Status of Surety Information: Documentation demonstrating that bonds or letters  
40 of credit as described in the site certificate are in full force and effect and will remain in full  
41 force and effect for the term of the next reporting period.

42 (v) Monitoring Report: A list and description of all significant monitoring and  
43 mitigation activities performed during the previous year in accordance with site certificate  
44 terms and conditions, a summary of the results of those activities and a discussion of any  
45 significant changes to any monitoring or mitigation program, including the reason for any  
46 such changes.

(vi) Compliance Report: A description of all instances of noncompliance with a site certificate condition. For ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable sections of the site certificate.

(vii) Facility Modification Report: A summary of changes to the facility that the certificate holder has determined do not require a site certificate amendment in accordance with OAR 345-027-0050.

(viii) Nongenerating Facility Carbon Dioxide Emissions: For nongenerating facilities that emit carbon dioxide, a report of the annual fuel use by fuel type and annual hours of operation of the carbon dioxide emitting equipment as described in OAR 345-024-0630(4).

22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange copies of all correspondence or summaries of correspondence related to compliance with statutes, rules and local ordinances on which the Council determined compliance, except for material withheld from public disclosure under state or federal law or under Council rules. The certificate holder may submit abstracts of reports in place of full reports; however, the certificate holder shall provide full copies of abstracted reports and any summarized correspondence at the request of the Department.

23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72 hours of any occurrence involving the facility if:

(a) There is an attempt by anyone to interfere with its safe operation;

(b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused event such as a fire or explosion affects or threatens to affect the public health and safety or the environment; or

(c) There is any fatal injury at the facility.

## **V. SPECIFIC FACILITY CONDITIONS**

The conditions listed in this section include conditions based on representations in the site certificate application and supporting record. The Council deems these representations to be binding commitments made by the applicant. These conditions are required under OAR 345-027-0020(10). The certificate holder must comply with these conditions in addition to the conditions listed in Section IV. This section includes other specific facility conditions the Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect public health and safety. For conditions that require subsequent review and approval of a future action, ORS 469.402 authorizes the Council to delegate the future review and approval to the Department if, in the Council's discretion, the delegation is warranted under the circumstances of the case.

### **1. Certificate Administration Conditions**

24 The certificate holder shall begin construction of the facility within three years after the effective date of the site certificate. Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council Chair and the applicant. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted.

25 The certificate holder shall complete construction of the facility within six years after the effective date of the site certificate. Construction is complete when: (1) the facility is

substantially complete as defined by the certificate holder's construction contract documents, (2) acceptance testing has been satisfactorily completed and (3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted.

26 Before beginning construction of the facility, the certificate holder shall notify the Department whether the turbines identified as H1, H2, H3, H4, L8, L9, L10, L11 and L12 on Figure C-3a of the site certificate application will be built as part of the Montague Wind Power Facility or whether the turbines will be built as part of the Leaning Juniper II Wind Power Facility.

27 The certificate holder shall construct a facility substantially as described in the site certificate and may select turbines of any type, subject to the following restrictions and compliance with all other site certificate conditions. Before beginning construction, the certificate holder shall provide to the Department a description of the turbine types selected for the facility demonstrating compliance with this condition.

(a) The total number of turbines at the facility must not exceed 269 turbines.

(b) The combined peak generating capacity of the facility must not exceed 404 megawatts and the peak generating capacity of any individual turbine must not exceed 3.0 megawatts.

(c) The turbine hub height must not exceed 100 meters and the maximum blade tip height must not exceed 150 meters.

(d) The minimum blade tip clearance must be 41 meters above ground.

(e) The certificate holder shall request an amendment of the site certificate to increase the combined peak generating capacity of the facility beyond 404 megawatts, to increase the number of wind turbines to more than 269 wind turbines or to install wind turbines with a hub height greater than 100 meters, a blade tip height greater than 150 meters or a blade tip clearance less than 41 meters above ground.

28 The certificate holder shall obtain all necessary federal, state and local permits or approvals required for construction, operation and retirement of the facility or ensure that its contractors obtain the necessary federal, state and local permits or approvals.

29 Before beginning construction, the certificate holder shall provide confirmation to the Department that the construction contractor or other third party has obtained all necessary permits or approvals and shall provide to the Department proof of agreements between the certificate holder and the third party regarding access to the resources or services secured by the permits or approvals.

30 Before beginning construction, the certificate holder shall notify the Department in advance of any work on the site that does not meet the definition of "construction" in ORS 469.300, excluding surveying, exploration or other activities to define or characterize the site, and shall provide to the Department a description of the work and evidence that its value is less than \$250,000.

31 Before beginning construction and after considering all micro-siting factors, the certificate holder shall provide to the Department, to the Oregon Department of Fish and Wildlife

(ODFW) and to the Planning Director of Gilliam County detailed maps of the facility site, showing the final locations where the certificate holder proposes to build facility components, and a table showing the acres of temporary and permanent habitat impact by habitat category and subtype, similar to Table 6 in the *Final Order on the Application*. The detailed maps of the facility site shall indicate the habitat categories of all areas that would be affected during construction (similar to Figures P-8a through P-8d in the site certificate application). In classifying the affected habitat into habitat categories, the certificate holder shall consult with the ODFW. The certificate holder shall not begin ground disturbance in an affected area until the habitat assessment has been approved by the Department. The Department may employ a qualified contractor to confirm the habitat assessment by on-site inspection.

32 Before beginning construction, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount is either \$21.511 million (3<sup>rd</sup> Quarter 2010 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).

(a) The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of the facility and turbine types selected by applying the unit costs and general costs illustrated in Table 2 in the *Final Order on the Application* and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department.

(b) The certificate holder shall adjust the amount of the bond or letter of credit, using the following calculation and subject to approval by the Department:

(i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in mid-2004 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the average of the 2<sup>nd</sup> Quarter and 3<sup>rd</sup> Quarter 2004 index values (to represent mid-2004 dollars) and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust mid-2004 dollars to present value.

(ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.

(iii) Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration and project management costs and 10 percent of the adjusted Gross Cost (ii) for the adjusted future developments contingency.

(iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest \$1,000 to determine the adjusted financial assurance amount.

(c) The certificate holder shall use a form of bond or letter of credit approved by the Council.

(d) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.

(e) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.

(f) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

33 If the certificate holder elects to use a bond to meet the requirements of Condition 32, the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety commences any activity to complete construction, operate or retire the energy facility.

34 Before beginning construction, the certificate holder shall notify the Department of the identity and qualifications of the major design, engineering and construction contractor(s) for the facility. The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall report to the Department any change of major contractors.

35 The certificate holder shall contractually require all construction contractors and subcontractors involved in the construction of the facility to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.

36 To ensure compliance with all site certificate conditions during construction, the certificate holder shall have a full-time, on-site assistant construction manager who is qualified in environmental compliance. The certificate holder shall notify the Department of the name, telephone number and e-mail address of this person.

37 Within 72 hours after discovery of conditions or circumstances that may violate the terms or conditions of the site certificate, the certificate holder shall report the conditions or circumstances to the Department.

## **2. Land Use Conditions**

38 The certificate holder shall consult with area landowners and lessees during construction and operation of the facility and shall implement measures to reduce or avoid any adverse impacts to farm practices on surrounding lands and to avoid any increase in farming costs.

39 The certificate holder shall design and construct the facility using the minimum land area necessary for safe construction and operation. The certificate holder shall locate access roads and temporary construction laydown and staging areas to minimize disturbance of farming practices and, wherever feasible, shall place turbines and transmission interconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations.

40 The certificate holder shall install gates on private access roads in accordance with Gilliam County Zoning Ordinance Section 7.020(T)(4)(d)(6) unless the County has granted a variance to this requirement.

41 Before beginning construction of the facility, the certificate holder shall record in the real property records of Gilliam County a Covenant Not to Sue with regard to generally

accepted farming practices on adjacent farmland consistent with GCZO Section 7.020(T)(4)(a)(5).

42 The certificate holder shall construct all facility components in compliance with the following setback requirements:

(a) All facility components must be at least 3,520 feet from the property line of properties zoned residential use or designated in the Gilliam County Comprehensive Plan as residential.

(b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest edge of any public road right-of-way. The certificate holder shall assume a minimum right-of-way width of 60 feet.

(c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest residence existing at the time of tower construction.

(d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest boundary of the certificate holder's lease area.

(e) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each turbine tower to the nearest edge of any railroad right-of-way or electrical substation.

(f) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each meteorological tower to the nearest edge of any public road right-of-way or railroad right-of-way, the nearest boundary of the certificate holder's lease area or the nearest electrical substation.

(g) The certificate holder shall maintain a minimum distance of 50 feet measured from any facility O&M building to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's lease area.

(h) The certificate holder shall maintain a minimum distance of 50 feet measured from any substation to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's electrical substation easement or, if there is no easement, the nearest boundary of the certificate holder's lease area.

43 During construction and operation of the facility, the certificate holder shall implement a weed control plan approved by the Gilliam County Weed Control Officer or other appropriate County officials to control the introduction and spread of noxious weeds.

44 During operation of the facility, the certificate holder shall restore areas that are temporarily disturbed during facility maintenance or repair activities using the same methods and monitoring procedures described in the *Revegetation Plan* referenced in Condition 92.

45 Within 90 days after beginning operation, the certificate holder shall provide to the Department and to the Gilliam County Planning Department the actual latitude and longitude location or Stateplane NAD 83(91) coordinates of each turbine tower, connecting lines and transmission lines and a summary of as-built changes in the facility compared to the original plan.

1     46   The certificate holder shall deliver a copy of the annual report required under Condition 21  
2           to the Gilliam County Planning Commission on an annual basis unless specifically  
3           discontinued by the County.

### 3. Cultural Resource Conditions

4     47   Before beginning construction, the certificate holder shall label all identified historic,  
5           cultural or archaeological resource sites on construction maps and drawings as “no entry”  
6           areas. If construction activities will occur within 200 feet of an identified site, the certificate  
7           holder shall flag a 30-meter no-entry buffer around the site. The certificate holder may use  
8           existing private roads within the buffer areas but may not widen or improve private roads  
9           within the buffer areas. The no-entry restriction does not apply to public road rights-of-way  
10          within the buffer areas or to operational farmsteads.

11    48   In reference to the alignment of the Oregon Trail described in the *Final Order on the*  
12          *Application*, the certificate holder shall comply with the following requirements:

13          (a) The certificate holder shall not locate facility components on visible remnants of the  
14          Oregon Trail and shall avoid any construction disturbance to those remnants.

15          (b) The certificate holder shall not locate facility components on undeveloped land where  
16          the trail alignment is marked by existing Oregon-California Trail Association markers.

17          (c) Before beginning construction, the certificate holder shall provide to the State Historic  
18          Preservation Office (SHPO) and the Department documentation of the presumed Oregon  
19          Trail alignments within the site boundary.

20          (d) The certificate holder shall ensure that construction personnel proceed carefully in the  
21          vicinity of the presumed alignments of the Oregon Trail. If any physical evidence of the  
22          trail is discovered, the certificate holder shall avoid any disturbance to the intact segments  
23          by redesign, re-engineering or restricting the area of construction activity and shall flag a  
24          30-meter no-entry buffer around the intact Trail segments. The certificate holder shall  
25          promptly notify the SHPO and the Department of the discovery. The certificate holder shall  
26          consult with the SHPO and the Department to determine appropriate mitigation measures.

27    49   Before beginning construction, the certificate holder shall provide to the Department a map  
28          showing the final design locations of all components of the facility, the areas that would be  
29          temporarily disturbed during construction and the areas that were surveyed in 2009 as  
30          described in the *Final Order on the Application*. The certificate holder shall hire qualified  
31          personnel to conduct field investigations of all areas to be disturbed during construction that  
32          lie outside the previously-surveyed areas. The certificate holder shall provide a written  
33          report of the field investigations to the Department and to the Oregon State Historic  
34          Preservation Office (SHPO) for review and approval. If any potentially significant historic,  
35          cultural or archaeological resources are found during the field investigation, the certificate  
36          holder shall instruct all construction personnel to avoid the identified sites and shall  
37          implement appropriate measures to protect the sites, including the measures described in  
38          Condition 47.

39    50   The certificate holder shall ensure that a qualified archaeologist, as defined in OAR 736-  
40          051-0070, instructs construction personnel in the identification of cultural materials and  
41          avoidance of accidental damage to identified resource sites.

1     51   The certificate holder shall ensure that construction personnel cease all ground-disturbing  
2         activities in the immediate area if any archaeological or cultural resources are found during  
3         construction of the facility until a qualified archaeologist can evaluate the significance of  
4         the find. The certificate holder shall notify the Department and the Oregon State Historic  
5         Preservation Office (SHPO) of the find. If the SHPO determines that the resource is  
6         significant, the certificate holder shall make recommendations to the Council for mitigation,  
7         including avoidance, field documentation and data recovery, in consultation with the  
8         Department, SHPO, interested Tribes and other appropriate parties. The certificate holder  
9         shall not restart work in the affected area until the certificate holder has demonstrated to the  
10        Department and the SHPO that it has complied with archaeological resource protection  
11        regulations.

#### **4. Geotechnical Conditions**

12    52   Before beginning construction, the certificate holder shall conduct a site-specific  
13         geotechnical investigation and shall report its findings to the Oregon Department of  
14         Geology & Mineral Industries (DOGAMI) and the Department. The certificate holder shall  
15         conduct the geotechnical investigation after consultation with DOGAMI and in general  
16         accordance with DOGAMI open file report 00-04 "Guidelines for Engineering Geologic  
17         Reports and Site-Specific Seismic Hazard Reports."

18    53   The certificate holder shall design and construct the facility in accordance with  
19         requirements of the Oregon Structural Specialty Code (OSSC 2007) and the 2006  
20         International Building Code.

21    54   The certificate holder shall design, engineer and construct the facility to avoid dangers to  
22         human safety presented by non-seismic hazards. As used in this condition, "non-seismic  
23         hazards" include settlement, landslides, flooding and erosion.

#### **5. Hazardous Materials, Fire Protection & Public Safety Conditions**

24    55   The certificate holder shall handle hazardous materials used on the site in a manner that  
25         protects public health, safety and the environment and shall comply with all applicable  
26         local, state and federal environmental laws and regulations. The certificate holder shall not  
27         store diesel fuel or gasoline on the facility site.

28    56   If a spill or release of hazardous material occurs during construction or operation of the  
29         facility, the certificate holder shall notify the Department within 72 hours and shall clean up  
30         the spill or release and dispose of any contaminated soil or other materials according to  
31         applicable regulations. The certificate holder shall make sure that spill kits containing items  
32         such as absorbent pads are located on equipment and at the O&M buildings. The certificate  
33         holder shall instruct employees about proper handling, storage and cleanup of hazardous  
34         materials.

35    57   The certificate holder shall construct turbines and pad-mounted transformers on concrete  
36         foundations and shall cover the ground within a 10-foot radius with non-flammable  
37         material. The certificate holder shall maintain the non-flammable pad area covering during  
38         operation of the facility.

39    58   The certificate holder shall install and maintain self-monitoring devices on each turbine,  
40         linked to sensors at the operations and maintenance building, to alert operators to



1 potentially dangerous conditions, and the certificate holder shall immediately remedy any  
2 dangerous conditions. The certificate holder shall maintain automatic equipment protection  
3 features in each turbine that would shut down the turbine and reduce the chance of a  
4 mechanical problem causing a fire.

5 59 During construction and operation of the facility, the certificate holder shall ensure that the  
6 O&M buildings and all service vehicles are equipped with shovels and portable fire  
7 extinguishers of a 4A5OBC or equivalent rating.

8 60 During construction and operation of the facility, the certificate holder shall develop and  
9 implement fire safety plans in consultation with the North Gilliam County Rural Fire  
10 Protection District to minimize the risk of fire and to respond appropriately to any fires that  
11 occur on the facility site. In developing the fire safety plans, the certificate holder shall take  
12 into account the dry nature of the region and shall address risks on a seasonal basis. The  
13 certificate holder shall meet annually with local fire protection agency personnel to discuss  
14 emergency planning and shall invite local fire protection agency personnel to observe any  
15 emergency drill or tower rescue training conducted at the facility.

16 61 Upon the beginning of operation of the facility, the certificate holder shall provide a site  
17 plan to the North Gilliam County Rural Fire Protection District. The certificate holder shall  
18 indicate on the site plan the identification number assigned to each turbine and the actual  
19 location of all facility structures. The certificate holder shall provide an updated site plan if  
20 additional turbines or other structures are later added to the facility. During operation, the  
21 certificate holder shall ensure that appropriate fire protection agency personnel have an up-  
22 to-date list of the names and telephone numbers of facility personnel available to respond  
23 on a 24-hour basis in case of an emergency on the facility site.

24 62 During construction, the certificate holder shall ensure that construction personnel are  
25 trained in fire prevention and response, that construction vehicles and equipment are  
26 operated on graveled areas to the extent possible and that open flames, such as cutting  
27 torches, are kept away from dry grass areas.

28 63 During operation of the facility, the certificate holder shall ensure that all on-site employees  
29 receive annual fire prevention and response training by qualified instructors or members of  
30 the local fire districts. The certificate holder shall ensure that all employees are instructed to  
31 keep vehicles on roads and off dry grassland, except when off-road operation is required for  
32 emergency purposes.

33 64 Before beginning construction, the certificate holder shall submit a Notice of Proposed  
34 Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon  
35 Department of Aviation identifying the proposed final locations of turbine towers and  
36 meteorological towers. The certificate holder shall promptly notify the Department of the  
37 responses from the FAA and the Oregon Department of Aviation.

38 65 The certificate holder shall follow manufacturers' recommended handling instructions and  
39 procedures to prevent damage to turbine or turbine tower components that could lead to  
40 failure.

41 66 The certificate holder shall construct turbine towers with no exterior ladders or access to the  
42 turbine blades and shall install locked tower access doors. The certificate holder shall keep  
43 tower access doors locked at all times, except when authorized personnel are present.

- 1     67   During operation of the facility, the certificate holder shall have a safety-monitoring  
2           program and shall inspect all turbine and turbine tower components on a regular basis. The  
3           certificate holder shall maintain or repair turbine and turbine tower components as  
4           necessary to protect public safety.
- 5     68   For turbine types having pad-mounted step-up transformers, the certificate holder shall  
6           install the transformers at the base of each tower in locked cabinets designed to protect the  
7           public from electrical hazards and to avoid creation of artificial habitat for raptor prey.
- 8     69   To protect the public from electrical hazards, the certificate holder shall enclose the facility  
9           substations with appropriate fencing and locked gates.
- 10    70   Before beginning construction of any new State Highway approaches or utility crossings,  
11          the certificate holder shall obtain all required permits from the Oregon Department of  
12          Transportation (ODOT) subject to the applicable conditions required by OAR Chapter 734,  
13          Divisions 51 and 55. The certificate holder shall submit the necessary application in a form  
14          satisfactory to ODOT and the Department for the location, construction and maintenance of  
15          a new approach to State Highway 19 for access to the site south of Tree Lane. The  
16          certificate holder shall submit the necessary application in a form satisfactory to ODOT and  
17          the Department for the location, construction and maintenance of transmission lines  
18          crossing Highway 19.
- 19    71   The certificate holder shall design and construct new access roads and private road  
20          improvements to standards approved by the Gilliam County Road Department or, where  
21          applicable, the Morrow County Public Works Department. Where modifications of County  
22          roads are necessary, the certificate holder shall construct the modifications entirely within  
23          the County road rights-of-way and in conformance with County road design standards  
24          subject to the approval of the Gilliam County Road Department or, where applicable, the  
25          Morrow County Public Works Department. Where modifications of State roads or  
26          highways are necessary, the certificate holder shall construct the modifications entirely  
27          within the public road rights-of-way and in conformance with Oregon Department of  
28          Transportation (ODOT) standards subject to the approval of ODOT.
- 29    72   The certificate holder shall construct access roads with a finished width of up to 20 feet,  
30          designed under the direction of a licensed engineer and compacted to meet equipment load  
31          requirements.
- 32    73   During construction of the facility, the certificate holder shall implement measures to  
33          reduce traffic impacts, including:
- 34          (a) Providing notice to adjacent landowners when heavy construction traffic is  
35          anticipated.
- 36          (b) Providing appropriate traffic safety signage and warnings.
- 37          (c) Requiring flaggers to be at appropriate locations at appropriate times during  
38          construction to direct traffic.
- 39          (d) Using traffic diversion equipment (such as advance signage and pilot cars) when slow  
40          or oversize construction loads are anticipated.
- 41          (e) Maintaining at least one travel lane at all times to the extent reasonably possible so  
42          that roads will not be closed to traffic because of construction vehicles.
- 43          (f) Encouraging carpooling for the construction workforce.

(g) Including traffic control procedures in contract specifications for construction of the facility.

(h) Keeping Highway 19 free of gravel that tracks out onto the highway at facility access points.

74 The certificate holder shall ensure that no equipment or machinery is parked or stored on any County road whether inside or outside the site boundary. The certificate holder may temporarily park equipment off the road but within County rights-of-way with the approval of the Gilliam County Road Department or, where applicable, the Morrow County Public Works Department.

75 The certificate holder shall cooperate with the Gilliam County Road Department and with the Morrow County Public Works Department to ensure that any unusual damage or wear to county roads that is caused by construction of the facility is repaired by the certificate holder. Upon completion of construction, the certificate holder shall restore public roads to pre-construction condition or better to the satisfaction of the applicable county departments. If required by Morrow County or Gilliam County, the certificate holder shall post bonds to ensure funds are available to repair and maintain roads affected by the proposed facility.

76 During construction, the certificate holder shall require that all on-site construction contractors develop and implement a site health and safety plan that informs workers and others on-site about first aid techniques and what to do in case of an emergency and that includes important telephone numbers and the locations of on-site fire extinguishers and nearby hospitals. The certificate holder shall ensure that construction contractors have personnel on-site who are trained and equipped for tower rescue and who are first aid and CPR certified.

77 During operation of the facility, the certificate holder shall develop and implement a site health and safety plan that informs employees and others on-site about first aid techniques and what to do in case of an emergency and that includes important telephone numbers and the locations of on-site fire extinguishers and nearby hospitals. The certificate holder shall ensure that operations personnel are trained and equipped for tower rescue.

78 During construction and operation of the facility, the certificate holder shall provide for on-site security and shall establish good communications between on-site security personnel and the Gilliam County Sheriff's Office. During operation, the certificate holder shall ensure that appropriate law enforcement agency personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site.

79 The certificate holder shall notify the Department of Energy and the Gilliam County Planning Department within 72 hours of any accidents including mechanical failures on the site associated with construction or operation of the facility that may result in public health and safety concerns.

## **6. Water, Soils, Streams & Wetlands Conditions**

80 The certificate holder shall conduct all construction work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of Environmental Quality and as required under the National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder

shall include in the ESCP any procedures necessary to meet local erosion and sediment control requirements or storm water management requirements.

81 During construction, the certificate holder shall limit truck traffic to improved road surfaces to avoid soil compaction, to the extent practicable.

82 During construction, the certificate holder shall implement best management practices to control any dust generated by construction activities, such as applying water to roads and disturbed soil areas.

83 Before beginning construction, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility and the areas that would be disturbed during construction and showing the wetlands and stream channels previously surveyed by CH2M HILL as described in the Final Order on the Application. For areas to be disturbed during construction that lie outside of the previously-surveyed areas, the certificate holder shall hire qualified personnel to conduct a pre-construction investigation to determine whether any jurisdictional waters of the State exist in those locations. The certificate holder shall provide a written report on the pre-construction investigation to the Department and the Department of State Lands for approval before beginning construction. The certificate holder shall ensure that construction and operation of the facility will have no impact on any jurisdictional water identified in the pre-construction investigation.

84 The certificate holder shall avoid impacts to waters of the state in the following manner:

(a) The certificate holder shall avoid any disturbance to delineated wetlands.

(b) The certificate holder shall construct stream crossings for roads and underground collector lines substantially as described in the Final Order on the Application. In particular, the certificate holder shall not remove material from waters of the State or add new fill material to waters of the State such that the total volume of removal and fill exceeds 50 cubic yards for the project as a whole.

(c) The certificate holder shall construct support poles for aboveground lines outside of delineated stream channels and shall avoid in-channel impacts.

85 During facility operation, the certificate holder shall routinely inspect and maintain all roads, pads and trenched areas and, as necessary, maintain or repair erosion and sediment control measures.

86 During facility operation, the certificate holder shall obtain water for on-site uses from on-site wells located near the O&M buildings. The certificate holder shall construct on-site wells subject to compliance with the provisions of ORS 537.765 relating to keeping a well log. The certificate holder shall not use more than 5,000 gallons of water per day from the on-site wells. The certificate holder may use other sources of water for on-site uses subject to prior approval by the Department.

87 During facility operation, if blade-washing becomes necessary, the certificate holder shall ensure that there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells. The certificate holder shall not use acids, bases or metal brighteners with the wash water. The certificate holder may use biodegradable, phosphate-free cleaners sparingly.

## **7. Transmission Line & EMF Conditions**

**88** The certificate holder shall install the 34.5-kV collector system underground to the extent practical. The certificate holder shall install underground lines at a minimum depth of three feet. Based on geotechnical conditions or other engineering considerations, the certificate holder may install segments of the collector system aboveground, but the total length of aboveground segments must not exceed 27 miles.

**89** The certificate holder shall take reasonable steps to reduce or manage human exposure to electromagnetic fields, including but not limited to:

(a) Constructing all aboveground transmission lines at least 200 feet from any residence or other occupied structure, measured from the centerline of the transmission line.

(b) Providing to landowners a map of underground and overhead transmission lines on their property and advising landowners of possible health risks from electric and magnetic fields.

(c) Designing and maintaining all transmission lines so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.

(d) Designing and maintaining all transmission lines so that induced voltages during operation are as low as reasonably achievable.

**90** In advance of, and during, preparation of detailed design drawings and specifications for 230-kV and 34.5-kV transmission lines, the certificate holder shall consult with the Utility Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the designs and specifications are consistent with applicable codes and standards.

## **8. Plants, Wildlife & Habitat Protection Conditions**

**91** The certificate holder shall conduct wildlife monitoring as described in the Wildlife Monitoring and Mitigation Plan that is incorporated in the Final Order on the Application as Attachment A and as amended from time to time.

**92** The certificate holder shall restore areas disturbed by facility construction but not occupied by permanent facility structures according to the methods and monitoring procedures described in the Revegetation Plan that is incorporated in the Final Order on the Application as Attachment B and as amended from time to time.

**93** The certificate holder shall acquire the legal right to create, enhance, maintain and protect a habitat mitigation area as long as the site certificate is in effect by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the Habitat Mitigation Plan that is incorporated in the Final Order on the Application as Attachment C and as amended from time to time.

**94** The certificate holder shall determine the boundaries of Category 1 Washington ground squirrel (WGS) habitat based on the locations where the squirrels were found to be active in the most recent WGS survey prior to the beginning of construction in habitat suitable for WGS foraging or burrow establishment ("suitable habitat"). The certificate holder shall hire a qualified professional biologist who has experience in detection of WGS to conduct surveys using a survey protocol approved by the Oregon Department of Fish and Wildlife

(ODFW). The biologist shall survey all areas of suitable habitat where permanent facility components would be located or where construction disturbance could occur. Except as provided in (a), the biologist shall conduct the protocol surveys in the active squirrel season (March 1 to May 31) in 2010 and in the active squirrel seasons in subsequent years until the beginning of construction in suitable habitat. The certificate holder shall provide written reports of the surveys to the Department and to ODFW and shall identify the boundaries of Category 1 WGS habitat. The certificate holder shall not begin construction within suitable habitat until the identified boundaries of Category 1 WGS habitat have been approved by the Department. Category 1 WGS habitat includes the areas described in (b) and (c).

(a) The certificate holder may omit the WGS survey in any year if the certificate holder avoids all permanent and temporary disturbance within suitable habitat until a WGS survey has been completed in the following year and the boundaries of Category 1 habitat have been determined and approved based on that survey.

(b) Category 1 WGS habitat includes the area within the perimeter of multiple active WGS burrows plus a 785-foot buffer, excluding areas of habitat types not suitable for WGS foraging or burrow establishment. If the multiple-burrow area was active in a prior survey year, then Category 1 habitat includes the largest extent of the active burrow area ever recorded (in the current or any prior-year survey), plus a 785-foot buffer.

(c) Category 1 WGS habitat includes the area containing single active burrow detections plus a 785-foot buffer, excluding areas of habitat types not suitable for WGS foraging or burrow establishment. Category 1 habitat does not include single-burrow areas that were found active in a prior survey year but that are not active in the current survey year.

95 The certificate holder shall implement measures to mitigate impacts to sensitive wildlife habitat during construction including, but not limited to, the following:

(a) The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.

(b) Before beginning construction, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility and the areas that would be disturbed during construction and identifying the survey areas for all plant and wildlife surveys conducted in 2010 or earlier as described in the Final Order on the Application. The certificate holder shall hire a qualified professional biologist to conduct a pre-construction plant and wildlife investigation of all areas that would be disturbed during construction that lie outside of the previously surveyed areas. The certificate holder shall provide a written report of the investigation to the Department and to the Oregon Department of Fish and Wildlife (ODFW). Based on consultation with the Department and ODFW, the certificate holder shall implement appropriate measures to avoid impacts to any Category 1 habitat, to any State-listed threatened or endangered plant or wildlife species, and to any State Candidate plant species.

(c) Before beginning construction, the certificate holder's qualified professional biologist shall survey the Category 1 Washington ground squirrel habitat to ensure that the sensitive use area is correctly marked with exclusion flagging and avoided during construction. The certificate holder shall maintain the exclusion markings until construction has been completed.

(d) Before beginning construction, certificate holder's qualified professional biologist shall complete the avian use studies that began in September 2009 at six plots within or near the facility site as described in the *Final Order on the Application*. The certificate

holder shall provide a written report on the avian use studies to the Department and to ODFW.

(e) Before beginning construction, certificate holder's qualified professional biologist shall complete raptor nest surveys within the raptor nest survey area as described in the Final Order on the Application. The purposes of the survey are to identify any sensitive raptor nests near construction areas and to provide baseline information on raptor nest use for analysis as described in the Wildlife Monitoring and Mitigation Plan referenced in Condition 91. The certificate holder shall provide a written report on the raptor nest surveys to the Department and to ODFW.

(f) In the final design layout of the facility, the certificate holder shall locate facility components, access roads and construction areas to avoid or minimize temporary and permanent impacts to high quality native habitat and to retain habitat cover in the general landscape where practicable.

96 During construction, the certificate holder shall avoid all construction activities within a 1,300-foot buffer around potentially-active nest sites of the following species during the sensitive period, as provided in this condition:

<u>Species</u>	<u>Sensitive Period</u>	<u>Early Release Date</u>
Swainson's hawk	April 1 to August 15	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

During the year in which construction occurs, the certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any active nests of these species within a half-mile of any areas that would be disturbed during construction. The certificate holder shall begin monitoring potential nest sites by March 15 and shall continue monitoring until at least May 31 to determine whether any potentially-active nest sites become active during the sensitive period.

If any nest site is determined to be unoccupied by the early release date (May 31), then unrestricted construction activities may occur within 1,300 feet of the nest site after that date. If a nest is occupied by any of these species after the beginning of the sensitive period, the certificate holder will flag the boundaries of a 1,300-foot buffer area around the nest site and shall instruct construction personnel to avoid disturbance of the buffer area. During the sensitive period, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) within the buffer area. The certificate holder shall restrict construction traffic within the buffer, except on public roads, to vehicles essential to the limited construction activities allowed within the buffer.

If burrowing owl nests are occupied during the sensitive period, the certificate holder may adjust the 1,300-foot buffer around these nests after consultation with ODFW and subject to the approval of the Department.

The certificate holder shall hire a qualified independent professional biologist to observe the active nest sites during the sensitive period for signs of disturbance and to notify the Department of any non-compliance with this condition. If the biologist observes nest site abandonment or other adverse impact to nesting activity, the certificate holder shall implement appropriate mitigation, in consultation with ODFW and subject to the approval

of the Department, unless the adverse impact is clearly shown to have a cause other than construction activity.

The certificate holder may begin or resume construction activities within the buffer area before the ending day of the sensitive period with the approval of ODFW, after the young are fledged. The certificate holder shall use a protocol approved by ODFW to determine when the young are fledged (the young are independent of the core nest site).

97 The certificate holder shall protect the area within 1,300 feet of the BLM Horn Butte Wildlife Area during the long-billed curlew nesting season (March 8 through June 15), as described in this condition. Before beginning construction, the certificate holder shall provide to the Department a map showing the areas of potential construction disturbance in the vicinity of the BLM lands that are part of the Horn Butte Wildlife Area and showing a 1,300-foot buffer from those areas. During the nesting season, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) or allow high levels of construction traffic within the buffer area. The certificate holder shall flag the boundaries of the 1,300-foot buffer area and shall instruct construction personnel to avoid any unnecessary activity within the buffer area. The certificate holder shall restrict construction traffic within the buffer, except on public roads, to vehicles essential to the limited construction activities allowed within the buffer. The certificate holder may engage in construction activities within the buffer area at times other than the nesting season.

98 The certificate holder shall implement measures to avoid or mitigate impacts to sensitive wildlife habitat during construction including, but not limited to, the following:

(a) Preparing maps to show exclusion areas that are off-limits to construction personnel, such as nesting or denning areas for sensitive wildlife species.

(b) Avoiding unnecessary road construction, temporary disturbance and vehicle use.

(c) Limiting construction work to approved and surveyed areas shown on facility constraints maps.

(d) Ensuring that all construction personnel are instructed to avoid driving cross-country or taking short-cuts within the site boundary or otherwise disturbing areas outside of the approved and surveyed construction areas.

99 The certificate holder shall reduce the risk of injuries to avian species by:

(a) Installing turbine towers that are smooth steel structures that lack features that would allow avian perching.

(b) Locating turbine towers to avoid areas of increased risk to avian species, such as cliff edges, narrow ridge saddles and gaps between hilltops.

(c) Installing meteorological towers that are non-guyed structures to eliminate the risk of avian collision with guy-wires.

(d) Designing and installing all aboveground transmission line support structures following the most current suggested practices for avian protection on power lines published by the Avian Power Line Interaction Committee.

100 The certificate holder shall hire a qualified environmental professional to provide environmental training during construction and operation. Environmental training includes information on the sensitive species present onsite, precautions to avoid injuring or destroying wildlife or sensitive wildlife habitat, exclusion areas, permit requirements and



1 other environmental issues. The certificate holder shall instruct construction and operations  
2 personnel to report any injured or dead wildlife detected while on the site to the appropriate  
3 onsite environmental manager.

4 101 The certificate holder shall impose and enforce a construction and operation speed limit of  
5 20 miles per hour throughout the facility site and, during the active squirrel season (March  
6 1 to May 31), a speed limit of 10 miles per hour from one hour before sunset to one hour  
7 after sunrise on private roads near known Washington ground squirrel (WGS) colonies. The  
8 certificate holder shall ensure that all construction and operations personnel are instructed  
9 to watch out for and avoid WGS and other wildlife while driving through the facility site.

## 9. Visual Effects Conditions

10 102 To reduce the visual impact of the facility, the certificate holder shall:

11 (a) Mount nacelles on smooth, steel structures, painted uniformly in a low-reflectivity,  
12 neutral white color.

13 (b) Paint the substation structures in a low-reflectivity neutral color to blend with the  
14 surrounding landscape.

15 (c) Not allow any advertising to be used on any part of the facility.

16 (d) Use only those signs required for facility safety, required by law or otherwise required  
17 by this site certificate, except that the certificate holder may erect a sign near the O&M  
18 buildings to identify the facility, may paint turbine numbers on each tower and may allow  
19 unobtrusive manufacturers' logos on turbine nacelles.

20 (e) Maintain any signs allowed under this condition in good repair.

21 103 The certificate holder shall design and construct the O&M buildings to be generally  
22 consistent with the character of similar buildings used by commercial farmers or ranchers in  
23 the area and shall paint the building in a low-reflectivity, neutral color to blend with the  
24 surrounding landscape.

25 104 The certificate holder shall not use exterior nighttime lighting except:

26 (a) The minimum turbine tower lighting required or recommended by the Federal  
27 Aviation Administration.

28 (b) Security lighting at the O&M buildings and at the substations, provided that such  
29 lighting is shielded or downward-directed to reduce glare.

30 (c) Minimum lighting necessary for repairs or emergencies.

31 (d) Minimum lighting necessary for construction directed to illuminate the work area and  
32 shielded or downward-directed to reduce glare.

33 105 The certificate holder shall maintain a minimum distance of 1,000 feet measured from the  
34 centerline of each turbine tower or meteorological tower to the centerline of the line-of-  
35 sight from the vantage point of the Fourmile Canyon interpretive site looking toward the  
36 visible Oregon Trail ruts (bearing S 89-42-34 W from latitude, longitude: 45.622047, -  
37 120.044112) as described in the *Final Order on the Application*.

## 10. Noise Control Conditions

38 106 To reduce construction noise impacts at nearby residences, the certificate holder shall:

39 (a) Confine the noisiest operation of heavy construction equipment to the daylight hours.

- (b) Require contractors to install and maintain exhaust mufflers on all combustion engine-powered equipment; and
- (c) Establish a complaint response system at the construction manager's office to address noise complaints.

107 Before beginning construction, the certificate holder shall provide to the Department:

(a) Information that identifies the final design locations of all turbines to be built at the facility.

(b) The maximum sound power level for the substation transformers and the maximum sound power level and octave band data for the turbines selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.

(c) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii) (IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines and substation transformers) would meet the ambient degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.

(d) For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels  $L_{10}$  and  $L_{50}$  by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

108 During operation of the facility, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall promptly notify the Department of any complaints received regarding facility noise and of any actions taken by the certificate holder to address those complaints. In response to a complaint from the owner of a noise sensitive property regarding noise levels during operation of the facility, the Council may require the certificate holder to monitor and record the statistical noise levels to verify that the certificate holder is operating the facility in compliance with the noise control regulations.

## **11. Waste Management Conditions**

109 The certificate holder shall provide portable toilets for on-site sewage handling during construction and shall ensure that they are pumped and cleaned regularly by a licensed contractor who is qualified to pump and clean portable toilet facilities.

110 During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the O&M buildings to licensed on-site septic systems in compliance with State permit requirements. The certificate holder shall design the septic systems for a discharge capacity of less than 2,500 gallons per day.

1 111 The certificate holder shall implement a waste management plan during construction that  
2 includes but is not limited to the following measures:

3 (a) Recycling steel and other metal scrap.

4 (b) Recycling wood waste.

5 (c) Recycling packaging wastes such as paper and cardboard.

6 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste  
7 hauler.

8 (e) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent  
9 materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for  
10 disposal by a licensed firm specializing in the proper recycling or disposal of hazardous  
11 wastes.

12 (f) Confining concrete delivery truck rinse-out within the foundation excavation,  
13 discharging rinse water into foundation holes and burying other concrete waste as part of  
14 backfilling the turbine foundation.

15 112 The certificate holder shall implement a waste management plan during facility operation  
16 that includes but is not limited to the following measures:

17 (a) Training employees to minimize and recycle solid waste.

18 (b) Recycling paper products, metals, glass and plastics.

19 (c) Recycling used oil and hydraulic fluid.

20 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste  
21 hauler.

22 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and oil-  
23 absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries  
24 for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous  
25 wastes.

## 26 VI. SUCCESSORS AND ASSIGNS

27 To transfer this site certificate or any portion thereof or to assign or dispose of it in any  
28 other manner, directly or indirectly, the certificate holder shall comply with OAR 345-027-0100.

## 29 VII. SEVERABILITY AND CONSTRUCTION

30 If any provision of this agreement and certificate is declared by a court to be illegal or in  
31 conflict with any law, the validity of the remaining terms and conditions shall not be affected,  
32 and the rights and obligations of the parties shall be construed and enforced as if the agreement  
33 and certificate did not contain the particular provision held to be invalid.

## VIII. GOVERNING LAW AND FORUM

32 This site certificate shall be governed by the laws of the State of Oregon. Any litigation  
33 or arbitration arising out of this agreement shall be conducted in an appropriate forum in Oregon.

**IX. EXECUTION**

This site certificate may be executed in counterparts and will become effective upon signature by the Chair of the Energy Facility Siting Council and the authorized representative of the certificate holder.

**IN WITNESS WHEREOF**, this site certificate has been executed by the State of Oregon, acting by and through its Energy Facility Siting Council, and by Montague Wind Power Facility LLC.

ENERGY FACILITY SITING COUNCIL

MONTAGUE WIND POWER LLC

By: W. Bryan Wolfe  
W. Bryan Wolfe, Chair  
Oregon Energy Facility Siting Council

Date: September 10, 2010

By: Rany Ravi

Print: Rany Ravi

Authorized Representative

Date: September 14, 2010

and

By: Scott Jacobson

Print: Scott Jacobson

Authorized Representative

Date: September 14, 2010