

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

**First Amended Site Certificate
for the
Helix Wind Power Facility**

June 24, 2011

The Oregon Energy Facility Siting Council

FIRST AMENDED SITE CERTIFICATE FOR THE HELIX WIND POWER FACILITY

I. INTRODUCTION

1 The Oregon Energy Facility Siting Council (Council) issues this site certificate for the
2 Helix Wind Power Facility (the facility) in the manner authorized under ORS Chapter 469. This
3 site certificate is a binding agreement between the State of Oregon (State), acting through the
4 Council, and Helix Wind Power Facility LLC (certificate holder) authorizing the certificate
5 holder to construct and operate the facility in Umatilla County, Oregon. [Amendment #1]

6 The findings of fact, reasoning and conclusions of law underlying the terms and
7 conditions of this site certificate are set forth in the following documents, incorporated herein by
8 this reference: (a) the *Final Order on the Application* for the facility issued on July 31, 2009, and
9 (b) the *Final Order on Amendment #1*. In interpreting this site certificate, any ambiguity will be
10 clarified by reference to the following, in order of priority: (1) this *First Amended Site*
11 *Certificate*, (2) the *Final Order on Amendment #1*, (3) the *Final Order on the Application* and (4)
12 the record of the proceedings that led to the *Final Order on the Application* and the *Final Order*
13 *on Amendment #1*. [Amendment #1]

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

II. SITE CERTIFICATION

- 16 1. To the extent authorized by state law and subject to the conditions set forth herein, the State
17 authorizes the certificate holder to construct, operate and retire a wind energy facility,
18 together with certain related or supporting facilities, at the site in Umatilla County, Oregon,
19 as described in Section III of this site certificate. ORS 469.401(1).
- 20 2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in
21 effect on the date that termination is sought or until the site certificate is revoked under ORS
22 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation
23 is ordered. ORS 469.401(1).
- 24 3. This site certificate does not address, and is not binding with respect to, matters that were not
25 addressed in the Council's final orders on the application and Amendment #1. Such matters
26 include, but are not limited to: building code compliance, wage, hour and other labor
27 regulations, local government fees and charges and other design or operational issues that do
28 not relate to siting the facility (ORS 469.401(4)) and permits issued under statutes and rules
29 for which the decision on compliance has been delegated by the federal government to a state
30 agency other than the Council. 469.503(3). [Amendment #1]
- 31 4. Both the State and the certificate holder shall abide by local ordinances, state law and the
32 rules of the Council in effect on the date this site certificate is executed. ORS 469.401(2). In
33 addition, upon a clear showing of a significant threat to public health, safety or the
34 environment that requires application of later-adopted laws or rules, the Council may require
35 compliance with such later-adopted laws or rules. ORS 469.401(2).

- 1 5. For a permit, license or other approval addressed in and governed by this site certificate, the
2 certificate holder shall comply with applicable state and federal laws adopted in the future to
3 the extent that such compliance is required under the respective state agency statutes and
4 rules. ORS 469.401(2).
- 5 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities and
6 political subdivisions in Oregon as to the approval of the site and the construction, operation
7 and retirement of the facility as to matters that are addressed in and governed by this site
8 certificate. ORS 469.401(3).
- 9 7. Each affected state agency, county, city and political subdivision in Oregon with authority to
10 issue a permit, license or other approval addressed in or governed by this site certificate shall,
11 upon submission of the proper application and payment of the proper fees, but without
12 hearings or other proceedings, issue such permit, license or other approval subject only to
13 conditions set forth in this site certificate. ORS 469.401(3).
- 14 8. After issuance of this site certificate, each state agency or local government agency that
15 issues a permit, license or other approval for the facility shall continue to exercise
16 enforcement authority over such permit, license or other approval. ORS 469.401(3).
- 17 9. After issuance of this site certificate, the Council shall have continuing authority over the site
18 and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or
19 request another state agency or local government to inspect, the site at any time in order to
20 ensure that the facility is being operated consistently with the terms and conditions of this
21 site certificate. ORS 469.430.

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

22 The energy facility is an electric power generating facility with an average electric
23 generating capacity of up to 67 megawatts and a peak generating capacity of not more than 201
24 megawatts that produces power from wind energy. The facility consists of not more than 134
25 wind turbines. The energy facility is described further in the final orders on the application and
26 Amendment #1. [Amendment #1]

(b) Related or Supporting Facilities

27 The facility includes the following related or supporting facilities described below and in
28 greater detail in the final orders on the application and Amendment #1:

- 29 · Power collection system
- 30 · Control system
- 31 · Collector substation
- 32 · 230-kV transmission line
- 33 · Meteorological (met) towers
- 34 · Operations and maintenance (O&M) facilities
- 35 · Access roads
- 36 · Transporter route roadway modifications
- 37 · Additional construction areas (including crane paths)

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. Segments of the collector system are aboveground.
5 Aboveground segments would be supported by H-frame or monopole support structures.

6 **Control System**

7 A fiber optic communications network links the control panels within each wind turbine
8 to a host computer at the O&M facilities. The Supervisory, Control and Data Acquisition
9 (SCADA) system at the O&M facilities collects operating and performance data from the
10 facility's turbines and met towers. SCADA communication lines would be installed mostly
11 underground. [Amendment #1]

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

13 The power collection system would link each turbine to the proposed Helix Substation.
14 The substation transformer would convert the 34.5-kV power from the collection system to 230-
15 kV. An aboveground, single-circuit 230-kV transmission line up to 15 miles in length would
16 connect the Helix Substation to an interconnection station. The 230-kV line would be supported
17 by H-frame structures with two galvanized steel or wood poles or by galvanized steel or wood
18 monopole structures. The power generated by the facility would connect to the regional
19 transmission grid through either the existing 230-kV transmission line owned by PacifiCorp or
20 the existing 500-kV transmission line owned by the Bonneville Power Administration (BPA).

21 The facility may include a second substation located within the area added to the facility
22 by Amendment #1 adjacent to North Juniper Canyon Road. If the second substation is built, it
23 would be connected to the Helix Substation by a new segment of 230-kV transmission line.
24 [Amendment #1]

25 **Meteorological Towers**

26 The facility includes up to four permanent meteorological (met) towers. [Amendment #1]

27 **O&M Facilities**

28 The certificate holder may construct one or two Operations and Maintenance (O&M)
29 facilities. Each O&M facility occupies a 3-acre site, including a fenced and graveled area for
30 parking and storage. [Amendment #1]

31 **Access Roads**

32 The facility includes up to 47.4 miles of new roads that provide access to the turbine
33 strings. The access roads connect to graveled turbine turnouts at the base of each turbine.
34 [Amendment #1]

35 **Temporary Roadway Modifications**

36 The certificate holder may construct temporary roadway modifications necessary to
37 enable safe transportation of turbine blades, tower segments and other components and
38 equipment during facility construction.

39 **Additional Construction Areas, Crane Paths, Batch Plant and Gravel Quarries**

40 During construction, 7-acre laydown areas may be located adjacent to each O&M facility
41 site. These two laydown areas may be constructed in alternate locations. Separate 2-acre

1 laydown areas may be located near each turbine string. The temporary laydown areas are used to
2 stage construction and store supplies and equipment. The facility includes construction crane
3 paths to move construction cranes between turbine strings. [Amendment #1]

2. Location of the Facility

4 The facility is located in Umatilla County approximately 2 miles northwest of Helix,
5 Oregon, in Townships 5 and 6 North and Ranges 31, 32 and 33 East. The facility is located
6 entirely on private land subject to long-term wind energy leases. [Amendment #1]

IV. CONDITIONS REQUIRED BY COUNCIL RULES

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

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

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

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

33 1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate
34 except as provided for in OAR Chapter 345, Division 27.

35 2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site to
36 the Department of Energy within 90 days after beginning operation of the facility. The legal
37 description required by this rule means a description of metes and bounds or a description
38 of the site by reference to a map and geographic data that clearly and specifically identifies
39 the outer boundaries that contain all parts of the facility.

- 1 3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire the
2 facility:
- 3 (a) Substantially as described in the site certificate;
- 4 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules,
5 and applicable state and local laws, rules and ordinances in effect at the time the site
6 certificate is issued; and
- 7 (c) In compliance with all applicable permit requirements of other state agencies.
- 8 4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of the
9 facility by the dates specified in the site certificate. (*See Conditions 24 and 25.*)
- 10 5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed
11 for wind energy facilities, transmission lines or pipelines under this section, the certificate
12 holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing
13 on any part of the site until the certificate holder has construction rights on all parts of the
14 site. For the purpose of this rule, “construction rights” means the legal right to engage in
15 construction activities. For wind energy facilities, transmission lines or pipelines, if the
16 certificate holder does not have construction rights on all parts of the site, the certificate
17 holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a
18 clearing on a part of the site if the certificate holder has construction rights on that part of
19 the site and:
- 20 (a) The certificate holder would construct and operate part of the facility on that part of
21 the site even if a change in the planned route of the transmission line or pipeline occurs
22 during the certificate holder’s negotiations to acquire construction rights on another part of
23 the site; or
- 24 (b) The certificate holder would construct and operate part of a wind energy facility on
25 that part of the site even if other parts of the facility were modified by amendment of the
26 site certificate or were not built.
- 27 6 OAR 345-027-0020(6): If the Council requires mitigation based on an affirmative finding
28 under any standards of Division 22 or Division 24 of this chapter, the certificate holder
29 shall consult with affected state agencies and local governments designated by the Council
30 and shall develop specific mitigation plans consistent with Council findings under the
31 relevant standards. The certificate holder must submit the mitigation plans to the
32 Department and receive Department approval before beginning construction or, as
33 appropriate, operation of the facility.
- 34 7 OAR 345-027-0020(7): The certificate holder shall prevent the development of any
35 conditions on the site that would preclude restoration of the site to a useful, non-hazardous
36 condition to the extent that prevention of such site conditions is within the control of the
37 certificate holder.
- 38 8 OAR 345-027-0020(8): Before beginning construction of the facility, the certificate holder
39 shall submit to the State of Oregon, through the Council, a bond or letter of credit, in a form
40 and amount satisfactory to the Council to restore the site to a useful, non-hazardous
41 condition. The certificate holder shall maintain a bond or letter of credit in effect at all
42 times until the facility has been retired. The Council may specify different amounts for the
43 bond or letter of credit during construction and during operation of the facility. (*See*
44 *Condition 31.*)

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

1 retirement plan, the Council may draw on the bond or letter of credit described in OAR
2 345-027-0020(8) to restore the site to a useful, non-hazardous condition according to the
3 final retirement plan, in addition to any penalties the Council may impose under OAR
4 Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay
5 the actual cost of retirement, the certificate holder shall pay any additional cost necessary to
6 restore the site to a useful, non-hazardous condition. After completion of site restoration,
7 the Council shall issue an order to terminate the site certificate if the Council finds that the
8 facility has been retired according to the approved final retirement plan.

9 17 OAR 345-027-0023(4): If the facility includes any transmission line under Council
10 jurisdiction:

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

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

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

25 19 OAR 345-027-0028: The following general monitoring conditions apply:

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

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

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

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

43 20 OAR 345-026-0048: Following receipt of the site certificate or an amended site certificate,
44 the certificate holder shall implement a plan that verifies compliance with all site certificate
45 terms and conditions and applicable statutes and rules. As a part of the compliance plan, to

1 verify compliance with the requirement to begin construction by the date specified in the
2 site certificate, the certificate holder shall report promptly to the Department of Energy
3 when construction begins. Construction is defined in OAR 345-001-0010. In reporting the
4 beginning of construction, the certificate holder shall describe all work on the site
5 performed before beginning construction, including work performed before the Council
6 issued the site certificate, and shall state the cost of that work. For the purpose of this
7 exhibit, "work on the site" means any work within a site or corridor, other than surveying,
8 exploration or other activities to define or characterize the site or corridor. The certificate
9 holder shall document the compliance plan and maintain it for inspection by the
10 Department or the Council.

11 21 OAR 345-026-0080: The certificate holder shall report according to the following
12 requirements:

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

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

22 (ii) By April 30 of each year after beginning construction, the certificate holder shall
23 submit an annual report to the Department addressing the subjects listed in OAR 345-026-
24 0080. The Council Secretary and the certificate holder may, by mutual agreement, change
25 the reporting date.

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

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

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

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

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

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

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

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

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

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

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

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

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

29 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72
30 hours of any occurrence involving the facility if:

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

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

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

V. SPECIFIC FACILITY CONDITIONS

36 The conditions listed in this section include conditions based on representations in the
37 site certificate application and supporting record. These conditions are required under OAR 345-
38 027-0020(10). The certificate holder must comply with these conditions in addition to the
39 conditions listed in Section IV. This section includes other specific facility conditions the
40 Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345,
41 Divisions 22 and 24, and to protect the public health and safety. For conditions that require
42 subsequent review and approval of a future action, ORS 469.402 authorizes the Council to

1 delegate the future review and approval to the Department if, in the Council's discretion, the
2 delegation is warranted under the circumstances of the case.

1. Certificate Administration Conditions

3 24 The certificate holder shall begin construction of the facility by August 5, 2012. Under
4 OAR 345-015-0085(9), a site certificate is effective upon execution by the Council Chair
5 and the applicant. The Council may grant an extension of the deadline to begin construction
6 in accordance with OAR 345-027-0030 or any successor rule in effect at the time the
7 request for extension is submitted. [Amendment #1]

8 25 The certificate holder shall complete construction of the facility by August 5, 2015.
9 Construction is complete when: 1) the facility is substantially complete as defined by the
10 certificate holder's construction contract documents, 2) acceptance testing has been
11 satisfactorily completed and 3) the energy facility is ready to begin continuous operation
12 consistent with the site certificate. The certificate holder shall promptly notify the
13 Department of the date of completion of construction. The Council may grant an extension
14 of the deadline for completing construction in accordance with OAR 345-027-0030 or any
15 successor rule in effect at the time the request for extension is submitted. [Amendment #1]

16 26 The certificate holder shall construct a facility substantially as described in the site
17 certificate and may select turbines of any type, subject to the following restrictions and
18 compliance with all other site certificate conditions. Before beginning construction, the
19 certificate holder shall provide to the Department a description of the turbine types selected
20 for the facility demonstrating compliance with this condition.

21 (a) The total number of turbines at the facility must not exceed 134 turbines.

22 (b) The combined peak generating capacity of the facility must not exceed 201
23 megawatts and the peak generating capacity of any individual turbine must not exceed 3.0
24 megawatts.

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

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

28 (e) The certificate holder shall request an amendment of the site certificate to increase the
29 combined peak generating capacity of the facility beyond 201 megawatts, to increase the
30 number of wind turbines to more than 134 wind turbines or to install wind turbines with a
31 hub height greater than 100 meters, a blade tip height greater than 150 meters or a blade tip
32 clearance less than 41 meters above ground.

33 [Amendment #1]

34 27 The certificate holder shall obtain all necessary federal, state and local permits or approvals
35 required for construction, operation and retirement of the facility or ensure that its
36 contractors obtain the necessary federal, state and local permits or approvals.

37 28 Before beginning construction, the certificate holder shall provide confirmation to the
38 Department that the construction contractor or other third party has obtained the necessary
39 permits or approvals and shall provide to the Department proof of agreements between the
40 certificate holder and the third party regarding access to the resources or services secured
41 by the permits or approvals.

1 29 Before beginning construction, the certificate holder shall notify the Department in advance
2 of any work on the site that does not meet the definition of “construction” in ORS 469.300,
3 excluding surveying, exploration or other activities to define or characterize the site, and
4 shall provide to the Department a description of the work and evidence that its value is less
5 than \$250,000.

6 30 Before beginning construction and after considering all micro-siting factors, the certificate
7 holder shall provide to the Department, to the Oregon Department of Fish and Wildlife
8 (ODFW) and to the Planning Director of Umatilla County detailed maps of the facility site,
9 showing the final locations where the certificate holder proposes to build facility
10 components, and a table showing the acres of temporary and permanent habitat impact by
11 habitat category and subtype, similar to Table 9 in the *Final Order on the Application*. The
12 detailed maps of the facility site shall indicate the habitat categories of all areas that would
13 be affected during construction (similar to Figures P-9 and P-10 in the site certificate
14 application). In classifying the affected habitat into habitat categories, the certificate holder
15 shall consult with the ODFW. The certificate holder shall not begin ground disturbance in
16 an affected area until the habitat assessment has been approved by the Department. The
17 Department may employ a qualified contractor to confirm the habitat assessment by on-site
18 inspection.

19 31 Before beginning construction, the certificate holder shall submit to the State of Oregon
20 through the Council a bond or letter of credit in the amount described herein naming the
21 State of Oregon, acting by and through the Council, as beneficiary or payee. The initial
22 bond or letter of credit amount is either \$14.930 million (in 1st Quarter 2011 dollars), to be
23 adjusted to the date of issuance as described in (b), or the amount determined as described
24 in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an
25 annual basis thereafter as described in (b).

26 (a) The certificate holder may adjust the amount of the bond or letter of credit based on
27 the final design configuration of the facility and turbine types selected by applying the unit
28 costs and general costs illustrated in Table 1 in the *Final Order on Amendment #1* and
29 calculating the financial assurance amount as described in that order, adjusted to the date of
30 issuance as described in (b) and subject to approval by the Department.

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

33 (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in
34 2nd Quarter 2010 dollars) to present value, using the U.S. Gross Domestic Product Implicit
35 Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative
36 Services’ “Oregon Economic and Revenue Forecast” or by any successor agency (the
37 “Index”) and using the 2nd Quarter 2010 index value for the base year and the quarterly
38 index value for the date of issuance of the new bond or letter of credit. If at any time the
39 Index is no longer published, the Council shall select a comparable calculation to adjust 2nd
40 Quarter 2010 dollars to present value.

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

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

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

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

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

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

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

11 [Amendment #1]

12 32 If the certificate holder elects to use a bond to meet the requirements of Condition 31, the
13 certificate holder shall ensure that the surety is obligated to comply with the requirements
14 of applicable statutes, Council rules and this site certificate when the surety exercises any
15 legal or contractual right it may have to assume construction, operation or retirement of the
16 energy facility. The certificate holder shall also ensure that the surety is obligated to notify
17 the Council that it is exercising such rights and to obtain any Council approvals required by
18 applicable statutes, Council rules and this site certificate before the surety commences any
19 activity to complete construction, operate or retire the energy facility.

20 33 Before beginning construction, the certificate holder shall notify the Department of the
21 identity and qualifications of the major design, engineering and construction contractor(s)
22 for the facility. The certificate holder shall select contractors that have substantial
23 experience in the design, engineering and construction of similar facilities. The certificate
24 holder shall report to the Department any change of major contractors.

25 34 The certificate holder shall contractually require all construction contractors and
26 subcontractors involved in the construction of the facility to comply with all applicable
27 laws and regulations and with the terms and conditions of the site certificate. Such
28 contractual provisions shall not operate to relieve the certificate holder of responsibility
29 under the site certificate.

30 35 During construction, the certificate holder shall have a full-time, on-site assistant
31 construction manager who is qualified in environmental compliance to ensure compliance
32 with all site certificate conditions. The certificate holder shall notify the Department of the
33 name, telephone number and e-mail address of this person.

34 36 Within 72 hours after discovery of conditions or circumstances that may violate the terms
35 or conditions of the site certificate, the certificate holder shall report the conditions or
36 circumstances to the Department.

2. Land Use Conditions

37 37 The certificate holder shall consult with area landowners and lessees during construction
38 and operation of the facility and shall implement measures to reduce or avoid any adverse
39 impacts to farm practices on surrounding lands and to avoid any increase in farming costs.

40 38 The certificate holder shall design and construct the facility using the minimum land area
41 necessary for safe construction and operation. The certificate holder shall locate access

1 roads and temporary construction laydown and staging areas to minimize disturbance of
2 farming practices and, wherever feasible, shall place turbines and transmission
3 interconnection lines along the margins of cultivated areas to reduce the potential for
4 conflict with farm operations.

5 39 The certificate holder shall design and construct the facility in compliance with the County
6 design requirements as described in Umatilla County Development Code Sections 152.010,
7 152.011, 152.015, 152.018, 152.063(E) and 152.616(HHH)(5)(F) in effect as of the date the
8 site certificate application was submitted (August 12, 2008).

9 40 The certificate holder shall design and construct new access roads and road improvements
10 to standards approved by the Umatilla County Public Works Director. The certificate holder
11 shall design new roads and road improvements to minimize alteration of natural drainage
12 and shall install culverts, water bars or other measures as necessary to reduce erosion. The
13 certificate holder shall consult with the Oregon Department of Fish and Wildlife and with
14 the local Soil and Water Conservation District for any minor drainage improvements
15 necessary to ensure effective drainage on surrounding agricultural lands.

16 41 To construct any of the transporter route road modifications as described in the *Final Order*
17 *on the Application* and the *Final Order on Amendment #1*, the certificate holder must obtain
18 approval from the Umatilla County Public Works Director or the appropriate official of the
19 City of Helix, as applicable, including approval of design specifications and any required
20 building permit. For any modifications that affect private property, the certificate holder
21 must obtain the consent of the landowner and provide the Department with written
22 documentation to verify the landowner's consent. Upon completion of construction of the
23 facility, the certificate holder shall restore the areas affected by any road modifications to a
24 condition approved by the affected landowner and subject to any requirements of the
25 applicable local government. [Amendment #1]

26 42 Before beginning construction of the facility, the certificate holder shall record in the real
27 property records of Umatilla County a Covenant Not to Sue with regard to generally
28 accepted farming practices on adjacent farmland consistent with Umatilla County Zoning
29 Ordinance Section 152.616(HHH)(2)(E).

30 43 The certificate holder shall construct all facility components in compliance with the
31 following setback requirements:

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

35 (b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of
36 110-percent of maximum blade tip height, measured from the centerline of the turbine
37 tower to the nearest edge of any public road right-of-way. The certificate holder shall
38 assume a minimum right-of-way width of 60 feet.

39 (c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of
40 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest
41 residence existing at the time of tower construction.

42 (d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of
43 110-percent of maximum blade tip height, measured from the centerline of the turbine
44 tower to the nearest boundary of the certificate holder's lease area.

- 1 44 During construction and operation of the facility, the certificate holder shall implement a
2 weed control plan approved by appropriate Umatilla County officials to control the
3 introduction and spread of noxious weeds.
- 4 45 During operation of the facility, the certificate holder shall restore areas that are temporarily
5 disturbed during facility maintenance or repair activities using the same methods and
6 monitoring procedures described in the Revegetation Plan referenced in Condition 89.
- 7 46 Within 90 days after beginning operation, the certificate holder shall provide to the
8 Department and to the Umatilla County Planning Department the actual latitude and
9 longitude location or Stateplane NAD 83(91) coordinates of each turbine tower, connecting
10 lines and transmission lines and a summary of as-built changes in the facility compared to
11 the original plan.
- 12 47 The certificate holder shall deliver a copy of the annual report required under Condition 21
13 to the Umatilla County Planning Commission on an annual basis unless specifically
14 discontinued by the County.

3. Cultural Resource Conditions

- 15 48 Before beginning construction, the certificate holder shall label all identified historic,
16 cultural or archaeological resource sites on construction maps and drawings as “no entry”
17 areas, and if construction activities will occur within 200 feet of an identified site, the
18 certificate holder shall flag a 30-meter no entry buffer around the site. The certificate holder
19 may use existing private roads within the buffer areas but may not widen or improve private
20 roads within the buffer areas. The no-entry restriction does not apply to public road rights-
21 of-way within buffer areas or to operational farmsteads. [Amendment #1]
- 22 49 Before beginning construction, the certificate holder shall provide to the Department a map
23 showing the final design locations of all components of the facility, the areas that would be
24 temporarily disturbed during construction and the areas that were surveyed in 2008 as
25 described in the *Final Order on the Application* and the areas that were surveyed in 2010 as
26 described in the *Final Order on Amendment #1*. The certificate holder shall hire qualified
27 personnel to conduct field investigation of all areas to be disturbed during construction that
28 lie outside the previously-surveyed areas. The certificate holder shall provide a written
29 report of the field investigation to the Department and to the Oregon State Historic
30 Preservation Office (SHPO). If any potentially significant historic, cultural, or
31 archaeological resource sites are found during the field investigation, the certificate holder
32 shall instruct all construction personnel to avoid the identified sites and shall implement
33 appropriate measures to protect the sites, including the measures described in Condition 48.
34 [Amendment #1]
- 35 50 The certificate holder shall ensure that a qualified archeologist, as defined in OAR 736-051-
36 0070, instructs construction personnel in the identification of cultural materials and
37 avoidance of accidental damage to identified resource sites.
- 38 51 The certificate holder shall ensure that construction personnel cease all ground-disturbing
39 activities in the immediate area if any archaeological or cultural resources are found during
40 construction of the facility until a qualified archeologist can evaluate the significance of the
41 find. The certificate holder shall notify the Department and the Oregon State Historic
42 Preservation Office (SHPO) of the find. If the SHPO determines that the resource is

1 significant, the certificate holder shall make recommendations to the Council for mitigation,
2 including avoidance, field documentation and data recovery, in consultation with the
3 Department, SHPO, interested tribes and other appropriate parties. The certificate holder
4 shall not restart work in the affected area until the certificate holder has demonstrated to the
5 Department and the SHPO that it has complied with archaeological resource protection
6 regulations.

4. Geotechnical Conditions

7 52 Before beginning construction, the certificate holder shall conduct a site-specific
8 geotechnical investigation and shall report its findings to the Oregon Department of
9 Geology & Mineral Industries (DOGAMI) and the Department. The certificate holder shall
10 conduct the geotechnical investigation after consultation with DOGAMI and in general
11 accordance with DOGAMI open file report 00-04 “Guidelines for Engineering Geologic
12 Reports and Site-Specific Seismic Hazard Reports.”

13 53 The certificate holder shall design and construct the facility in accordance with
14 requirements of the Oregon Structural Specialty Code (OSSC 2007) and the 2006
15 International Building Code.

16 54 The certificate holder shall design, engineer and construct the facility to avoid dangers to
17 human safety presented by non-seismic hazards. As used in this condition, “non-seismic
18 hazards” include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

19 55 The certificate holder shall handle hazardous materials used on the site in a manner that
20 protects public health, safety and the environment and shall comply with all applicable
21 local, state and federal environmental laws and regulations. The certificate holder shall not
22 store diesel fuel or gasoline on the facility site.

23 56 If a spill or release of hazardous material occurs during construction or operation of the
24 facility, the certificate holder shall notify the Department within 72 hours and shall clean up
25 the spill or release and dispose of any contaminated soil or other materials according to
26 applicable regulations. The certificate holder shall make sure that spill kits containing items
27 such as absorbent pads are located on equipment and at the O&M buildings. The certificate
28 holder shall instruct employees about proper handling, storage and cleanup of hazardous
29 materials. [Amendment #1]

30 57 The certificate holder shall construct turbines and pad-mounted transformers on concrete
31 foundations and shall cover the ground within a 10-foot radius with non-flammable
32 material. The certificate holder shall maintain the non-flammable pad area covering during
33 operation of the facility.

34 58 The certificate holder shall install and maintain self-monitoring devices on each turbine,
35 linked to sensors at the operations and maintenance building, to alert operators to
36 potentially dangerous conditions, and the certificate holder shall immediately remedy any
37 dangerous conditions. The certificate holder shall maintain automatic equipment protection
38 features in each turbine that would shut down the turbine and reduce the chance of a
39 mechanical problem causing a fire.

- 1 59 During construction and operation of the facility, the certificate holder shall ensure that the
2 O&M facilities and all service vehicles are equipped with shovels and portable fire
3 extinguishers of a 4A5OBC or equivalent rating. [Amendment #1]
- 4 60 During construction and operation of the facility, the certificate holder shall develop and
5 implement fire safety plans in consultation with the Milton-Freewater Rural Fire
6 Department to minimize the risk of fire and to respond appropriately to any fires that occur
7 on the facility site. In developing the fire safety plans, the certificate holder shall take into
8 account the dry nature of the region and shall address risks on a seasonal basis. The
9 certificate holder shall meet annually with local fire protection agency personnel to discuss
10 emergency planning and shall invite local fire protection agency personnel to observe any
11 emergency drill or tower rescue training conducted at the facility.
- 12 61 Upon the beginning of operation of the facility, the certificate holder shall provide a site
13 plan to the Milton-Freewater Rural Fire Department. The certificate holder shall indicate on
14 the site plan the identification number assigned to each turbine and the actual location of all
15 facility structures. The certificate holder shall provide an updated site plan if additional
16 turbines or other structures are later added to the facility. During operation, the certificate
17 holder shall ensure that appropriate fire protection agency personnel have an up-to-date list
18 of the names and telephone numbers of facility personnel available to respond on a 24-hour
19 basis in case of an emergency on the facility site.
- 20 62 During construction, the certificate holder shall ensure that construction vehicles and
21 equipment are operated on graveled areas to the extent possible and that open flames, such
22 as cutting torches, are kept away from dry grass areas.
- 23 63 During operation, the certificate holder shall ensure that all on-site employees receive
24 annual fire prevention and response training by qualified instructors or members of the
25 local fire districts. The certificate holder shall ensure that all employees are instructed to
26 keep vehicles on roads and off dry grassland, except when off-road operation is required for
27 emergency purposes.
- 28 64 Before beginning construction, the certificate holder shall submit a Notice of Proposed
29 Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon
30 Department of Aviation identifying the proposed final locations of turbine towers and
31 meteorological towers. The certificate holder shall promptly notify the Department of the
32 responses from the FAA and the Oregon Department of Aviation.
- 33 65 The certificate holder shall follow manufacturers' recommended handling instructions and
34 procedures to prevent damage to turbine or turbine tower components that could lead to
35 failure.
- 36 66 The certificate holder shall construct turbine towers with no exterior ladders or access to the
37 turbine blades and shall install locked tower access doors. The certificate holder shall keep
38 tower access doors locked at all times, except when authorized personnel are present.
- 39 67 The certificate holder shall have an operational safety-monitoring program and shall inspect
40 all turbine and turbine tower components on a regular basis. The certificate holder shall
41 maintain or repair turbine and turbine tower components as necessary to protect public
42 safety.

- 1 68 For turbine types having pad-mounted step-up transformers, the certificate holder shall
2 install the transformers at the base of each tower in locked cabinets designed to protect the
3 public from electrical hazards and to avoid creation of artificial habitat for raptor prey.
- 4 69 To protect the public from electrical hazards, the certificate holder shall enclose the facility
5 substations with appropriate fencing and locked gates. [Amendment #1]
- 6 70 The certificate holder shall construct access roads with a finished width of approximately
7 20 feet wide, designed under the direction of a licensed engineer and compacted to meet
8 equipment load requirements.
- 9 71 During construction of the facility, the certificate holder shall implement measures to
10 reduce traffic impacts, including:
11 (a) The certificate holder shall include traffic control measures in contract specifications
12 for construction of the facility.
13 (b) The certificate holder shall provide notices to adjacent landowners when construction
14 takes place to help minimize access disruptions.
15 (c) The certificate holder shall use road signage and flaggers at appropriate locations at
16 appropriate times during construction to direct traffic and to ensure minimal conflicts
17 between construction vehicles and harvest vehicles.
18 (d) Before beginning construction, the certificate holder shall submit to the Umatilla
19 County Public Works Department, to the City of Helix and to the Department a final
20 transportation plan that addresses traffic safety.
- 21 72 The certificate holder shall cooperate with the Umatilla County Public Works Department
22 and the appropriate officials of the City of Helix to ensure that any unusual damage or wear
23 to county or City roads that is caused by construction of the facility is repaired by the
24 certificate holder. Upon completion of construction, the certificate holder shall restore
25 public roads to pre-construction condition or better to the satisfaction of the Umatilla
26 County Public Works Department and City of Helix officials.
- 27 73 During construction, the certificate holder shall require that all on-site construction
28 contractors develop and implement a site health and safety plan that informs workers and
29 others on-site what to do in case of an emergency and that includes the locations of fire
30 extinguishers and nearby hospitals, important telephone numbers and first aid techniques.
31 The certificate holder shall ensure that construction contractors have personnel on-site who
32 are trained and equipped for tower rescue and who are first aid and CPR certified.
- 33 74 During operation, the certificate holder shall develop and implement a site health and safety
34 plan that informs employees and others on-site what to do in case of an emergency and that
35 includes the locations of fire extinguishers and nearby hospitals, important telephone
36 numbers and first aid techniques.
- 37 75 During construction and operation of the facility, the certificate holder shall provide for on-
38 site security and shall establish good communications between on-site security personnel
39 and the Umatilla County Sheriff's Office. During operation, the certificate holder shall
40 ensure that appropriate law enforcement agency personnel have an up-to-date list of the
41 names and telephone numbers of facility personnel available to respond on a 24-hour basis
42 in case of an emergency on the facility site.

1 76 The certificate holder shall notify the Department of Energy and the Umatilla County
2 Planning Department within 72 hours of any accidents including mechanical failures on the
3 site associated with construction or operation of the facility that may result in public health
4 and safety concerns.

6. Water, Soils, Streams & Wetlands Conditions

5 77 The certificate holder shall conduct all construction work in compliance with an Erosion
6 and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of
7 Environmental Quality and as required under the National Pollutant Discharge Elimination
8 System (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder
9 shall include in the ESCP any procedures necessary to meet local erosion and sediment
10 control requirements or storm water management requirements.

11 78 During construction, the certificate holder shall limit truck traffic to improved road surfaces
12 to avoid soil compaction, to the extent practicable.

13 79 During construction, the certificate holder shall implement best management practices to
14 control any dust generated by construction activities, such as applying water to roads and
15 disturbed soil areas.

16 80 Before beginning construction, the certificate holder shall provide to the Department a map
17 showing the final design locations of all components of the facility and the areas that would
18 be disturbed during construction and showing the wetlands and stream channels previously
19 surveyed by CH2M HILL as described in the *Final Order on the Application* and the *Final*
20 *Order on Amendment #1*. For areas to be disturbed during construction that lie outside of
21 the previously-surveyed areas, the certificate holder shall hire qualified personnel to
22 conduct a pre-construction investigation to determine whether any jurisdictional waters of
23 the State exist in those locations. The certificate holder shall provide a written report on the
24 pre-construction investigation to the Department and the Department of State Lands for
25 approval before beginning construction. The certificate holder shall ensure that construction
26 and operation of the facility will have no impact on any jurisdictional water identified in the
27 pre-construction investigation. [Amendment #1]

28 81 The certificate holder shall construct stream crossings substantially as described in the
29 *Final Order on the Application*. In particular, the certificate holder shall not remove
30 material from waters of the State or add new fill material to waters of the State such that the
31 total volume of removal and fill exceeds 50 cubic yards for the project as a whole.

32 82 During facility operation, the certificate holder shall routinely inspect and maintain all
33 roads, pads and trenched areas and, as necessary, maintain or repair erosion and sediment
34 control measures.

35 83 During facility operation, the certificate holder shall obtain water for on-site uses from an
36 on-site well located near the O&M building. If two O&M facilities are built, each facility
37 may have an on-site well. The certificate holder shall construct the on-site well subject to
38 compliance with the provisions of ORS 537.765 relating to keeping a well log. The
39 certificate holder shall not use more than 5,000 gallons of water per day from all on-site
40 wells. The certificate holder may use other sources of water for on-site uses subject to prior
41 approval by the Department. [Amendment #1]

1 84 During facility operation, if blade-washing becomes necessary, the certificate holder shall
2 ensure that there is no runoff of wash water from the site or discharges to surface waters,
3 storm sewers or dry wells. The certificate holder shall not use acids, bases or metal
4 brighteners with the wash water. The certificate holder may use biodegradable, phosphate-
5 free cleaners sparingly.

7. Transmission Line & EMF Conditions

6 85 The certificate holder shall install the 34.5-kV collector system underground to the extent
7 practical. The certificate holder shall install underground lines at a minimum depth of three
8 feet. Based on geotechnical conditions or other engineering considerations, the certificate
9 holder may install segments of the collector system aboveground, but the total length of
10 aboveground segments must not exceed 30 percent of the total length of the collector
11 system.

12 86 The certificate holder shall take reasonable steps to reduce or manage human exposure to
13 electromagnetic fields, including but not limited to:

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

16 (b) Constructing all aboveground 34.5-kV transmission lines with a minimum clearance
17 of 25 feet from the ground.

18 (c) Constructing all aboveground 230-kV transmission lines with a minimum clearance of
19 30 feet from the ground.

20 (d) Fencing the areas around the facility substations to ensure that substation equipment
21 is not accessible to the public.

22 (e) Providing to landowners a map of underground and overhead transmission lines on
23 their property and advising landowners of possible health risks.

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

27 87 In advance of, and during, preparation of detailed design drawings and specifications for
28 230-kV and 34.5-kV transmission lines, the certificate holder shall consult with the Utility
29 Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the
30 designs and specifications are consistent with applicable codes and standards.

8. Plants, Wildlife & Habitat Protection Conditions

31 88 The certificate holder shall conduct wildlife monitoring as described in the *Wildlife*
32 *Monitoring and Mitigation Plan* that is incorporated in the *Final Order on the Application*
33 as Attachment A and as amended from time to time.

34 89 The certificate holder shall restore areas disturbed by facility construction but not occupied
35 by permanent facility structures according to the methods and monitoring procedures
36 described in the *Revegetation Plan* that is incorporated in the *Final Order on the*
37 *Application* as Attachment B and as amended from time to time.

38 90 The certificate holder shall acquire the legal right to create, enhance, maintain and protect a
39 habitat mitigation area as long as the site certificate is in effect by means of an outright
40 purchase, conservation easement or similar conveyance and shall provide a copy of the

1 documentation to the Department. Within the habitat mitigation area, the certificate holder
2 shall improve the habitat quality as described in the *Habitat Mitigation Plan* that is
3 incorporated in the *Final Order on Amendment #1* as Attachment C and as amended from
4 time to time. [Amendment #1]

5 91 The certificate holder may construct turbines and other facility components within the site
6 boundary as described in the *Final Order on Amendment #1*, subject to the following
7 requirements addressing potential habitat impact:

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

10 (b) Before beginning construction, the certificate holder shall provide to the Department a
11 map showing the final design locations of all components of the facility, the areas that
12 would be disturbed during construction, the areas that were surveyed in 2008 as described
13 in the site certificate application and the areas that were surveyed in 2010 as described in
14 the *Final Order on Amendment #1*. The certificate holder shall hire a qualified professional
15 biologist to conduct a pre-construction biological investigation of all areas to be disturbed
16 during construction that lie outside of the areas surveyed in 2008 and 2010. The certificate
17 holder shall provide a written report of the investigation to the Department and to the
18 Oregon Department of Fish and Wildlife (ODFW). Based on consultation with the
19 Department and ODFW, the certificate holder shall implement appropriate measures to
20 avoid impacts to any Category 1 habitat or to any State-listed plant or wildlife species
21 found during the investigation.

22 (c) Before beginning construction, the certificate holder's qualified professional biologist
23 shall survey the edge of the previously-identified Washington ground squirrel colony to
24 ensure that the sensitive use area is correctly marked with exclusion flagging and avoided
25 during construction. The certificate holder shall maintain the exclusion markings until
26 construction has been completed.

27 (d) After the certificate holder has determined the final design route of the 230-kV
28 transmission line, the certificate holder shall hire a qualified professional biologist to
29 conduct a pre-construction raptor nest survey within a half-mile buffer of the final route in
30 all areas that were not previously surveyed in 2008 as described in the site certificate
31 application or in 2010 as described in the *Final Order on Amendment #1*. The purpose of
32 the survey is to identify any sensitive raptor nests near the final transmission line route and
33 to provide baseline information on raptor nest use for analysis as described in the *Wildlife*
34 *Monitoring and Mitigation Plan* referenced in Condition 88.

35 (e) In the final design layout of the facility, the certificate holder shall locate facility
36 components to avoid or minimize temporary and permanent impacts to high quality native
37 habitat and to retain habitat cover in the general landscape where practicable.

38 [Amendment #1]

39 92 During construction, the certificate holder shall avoid all construction activities within a
40 1,300-foot buffer around potentially-active nest sites of the following species during the
41 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

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

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

17 The certificate holder shall hire a qualified independent professional biologist to observe
18 the active nest sites during the sensitive period for signs of disturbance and to notify the
19 Department of any non-compliance with this condition. If the biologist observes nest site
20 abandonment or other adverse impact to nesting activity, the certificate holder shall
21 implement appropriate mitigation, in consultation with ODFW and subject to the approval
22 of the Department, unless the adverse impact is clearly shown to have a cause other than
23 construction activity.

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

28 93 The certificate holder shall implement measures to avoid or mitigate impacts to sensitive
29 wildlife habitat during construction including, but not limited to, the following:

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

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

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

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

38 94 The certificate holder shall reduce the risk of injuries to avian species by:

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

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

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

6 95 The certificate holder shall hire a qualified environmental professional to provide
7 environmental training during construction and operation. Environmental training includes
8 information on the sensitive species present onsite, precautions to avoid injuring or
9 destroying wildlife or sensitive wildlife habitat, exclusion areas, permit requirements and
10 other environmental issues. The certificate holder shall instruct construction and operations
11 personnel to report any injured or dead wildlife detected while on the site to the biological
12 monitor during construction or appropriate onsite manager during operations.

13 96 The certificate holder shall impose and enforce a construction and operation speed limit of
14 20 miles per hour throughout the facility site and a speed limit of 10 miles per hour from
15 one hour before sunset to one hour after sunrise on the access road near the known
16 Washington ground squirrel (WGS) colony. The certificate holder shall ensure that all
17 construction and operations personnel are instructed to watch out for WGS and other
18 wildlife while driving through the project area.

9. Visual Effects Conditions

19 97 To reduce the visual impact of the facility, the certificate holder shall:

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

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

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

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

29 (e) Design signs in accordance with Umatilla County design requirements for signs as
30 described in UCDC Sections 152.545 through 152.548.

31 (f) Maintain any signs allowed under this condition in good repair.

32 [Amendment #1]

33 98 The certificate holder shall design and construct the O&M buildings to be generally
34 consistent with the character of similar buildings used by commercial farmers or ranchers in
35 the area and shall paint the building in a low-reflectivity, neutral color to blend with the
36 surrounding landscape. [Amendment #1]

37 99 The certificate holder shall not use exterior nighttime lighting except:

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

40 (b) Safety and security lighting at the O&M facilities and substations, if such lighting is
41 shielded or downward-directed to reduce glare.

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

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

3 [Amendment #1]

10. Noise Control Conditions

4 100 To reduce construction noise impacts at nearby residences, the certificate holder shall:

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

6 (b) Require contractors to install and maintain exhaust mufflers on all combustion
7 engine-powered equipment; and

8 (c) Establish a complaint response system at the construction manager's office to address
9 noise complaints.

10 101 Before beginning construction, the certificate holder shall provide to the Department:

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

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

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

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

32 102 During operation, the certificate holder shall maintain a complaint response system to
33 address noise complaints. The certificate holder shall promptly notify the Department of
34 any complaints received regarding facility noise and of any actions taken by the certificate
35 holder to address those complaints. In response to a complaint from the owner of a noise
36 sensitive property regarding noise levels during operation of the facility, the Council may
37 require the certificate holder to monitor and record the statistical noise levels to verify that
38 the certificate holder is operating the facility in compliance with the noise control
39 regulations.

11. Waste Management Conditions

1 103 The certificate holder shall provide portable toilets for on-site sewage handling during
2 construction and shall ensure that they are pumped and cleaned regularly by a licensed
3 contractor who is qualified to pump and clean portable toilet facilities.

4 104 During operation, the certificate holder shall discharge sanitary wastewater generated at the
5 O&M building to a licensed on-site septic system in compliance with State and County
6 permit requirements. If two O&M facilities are built, each facility may have an on-site
7 septic system. The certificate holder shall design the septic systems for a discharge capacity
8 of less than 2,500 gallons per day. [Amendment #1]

9 105 The certificate holder shall implement a waste management plan during construction that
10 includes but is not limited to the following measures:

11 (a) Recycling steel and other metal scrap.

12 (b) Recycling wood waste.

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

14 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste
15 hauler or by using facility equipment and personnel to haul the waste.

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

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

23 106 The certificate holder shall implement a waste management plan during operation that
24 includes but is not limited to the following measures:

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

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

27 (c) Recycling used oil and hydraulic fluid.

28 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste
29 hauler or by using facility equipment and personnel to haul the waste.

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

VI. SUCCESSORS AND ASSIGNS

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

VII. SEVERABILITY AND CONSTRUCTION

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

VIII. GOVERNING LAW AND FORUM

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

IX. EXECUTION

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

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

ENERGY FACILITY SITING COUNCIL

HELIX WIND POWER FACILITY, LLC

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

By: _____
Print: _____

Date: _____

Date: _____

and

By: _____

Print: _____

Date: _____