

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

**Site Certificate
for the
Shepherds Flat Wind Farm**

July 25, 2008

The Oregon Energy Facility Siting Council
SITE CERTIFICATE FOR THE SHEPHERDS FLAT WIND FARM

I. INTRODUCTION

1 The Oregon Energy Facility Siting Council (Council) issues this site certificate for the
2 Shepherds Flat Wind Farm (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 Caithness Shepherds Flat, LLC (certificate holder) authorizing the certificate holder
5 to construct and operate the facility in Gilliam County and Morrow County, Oregon.

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 Council's Final Order on the Application for
8 the facility issued on July 25, 2008, and incorporated herein by this reference. In interpreting this
9 site certificate, any ambiguity will be clarified by reference to the following, in order of priority:
10 (1) this Site Certificate, (2) the Final Order on the Application and (3) the record of the
11 proceedings that led to the Final Order on the Application.

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

II. SITE CERTIFICATION

- 14 1. To the extent authorized by state law and subject to the conditions set forth herein, the State
15 authorizes the certificate holder to construct, operate and retire a wind energy facility,
16 together with certain related or supporting facilities, at the site in Gilliam County and
17 Morrow County, Oregon, as described in Section III of this site certificate. ORS 469.401(1).
- 18 2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in
19 effect on the date that termination is sought or until the site certificate is revoked under ORS
20 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation
21 is ordered. ORS 469.401(1).
- 22 3. This site certificate does not address, and is not binding with respect to, matters that were not
23 addressed in the Council's Final Order on the Application for the facility. Such matters
24 include, but are not limited to: building code compliance, wage, hour and other labor
25 regulations, local government fees and charges and other design or operational issues that do
26 not relate to siting the facility (ORS 469.401(4)) and permits issued under statutes and rules
27 for which the decision on compliance has been delegated by the federal government to a state
28 agency other than the Council. 469.503(3).
- 29 4. Both the State and the certificate holder shall abide by local ordinances, state law and the
30 rules of the Council in effect on the date this site certificate is executed. ORS 469.401(2). In
31 addition, upon a clear showing of a significant threat to public health, safety or the
32 environment that requires application of later-adopted laws or rules, the Council may require
33 compliance with such later-adopted laws or rules. ORS 469.401(2).
- 34 5. For a permit, license or other approval addressed in and governed by this site certificate, the
35 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 facility with an average electric
21 generating capacity of up to 303 megawatts and a peak generating capacity of not more than 909
22 megawatts that produces power from wind energy. The facility consists of not more than 303
23 wind turbines. The energy facility is described further in the Final Order on the Application.

(b) Related or Supporting Facilities

24 The facility includes the following related or supporting facilities described below and in
25 greater detail in the Final Order on the Application:

- 26 • Power Collection System
- 27 • Collector Substations
- 28 • Meteorological towers
- 29 • Field workshops
- 30 • Control system
- 31 • Access roads
- 32 • Additional construction areas

Power Collection System

33
34 A power collection system operating at 34.5 kilovolts (kV) transports power from each
35 turbine to a collector substation. To the extent practicable, the collection system is installed
36 underground at a depth of at least three feet. Segments of the collector system are aboveground.

1 Aboveground segments are installed on single-pole, cross-arm structures or understrung on the
2 230-kV transmission line support structures (described below).

3 **Collector Substations and Interconnection**

4 The facility includes two collector substations, one in the southern project area and one in
5 the northern project area. The facility includes a single-circuit, 230-kV transmission line from
6 the south substation to the north substation and a double-circuit, 230-kV transmission line
7 between the north substation and the interconnection site. The interconnection site is located at
8 the Bonneville Power Administration Slatt Switching Station.

9 **Meteorological Towers**

10 The facility includes six permanent meteorological (met) towers.

11 **Field Workshops**

12 The facility includes two field workshops. Including fenced areas, the field workshop in
13 the northern project area occupies about 1.6 acres, and the field workshop in the southern project
14 area occupies about 1.4 acres.

15 **Control System**

16 A fiber optic communications network links the control panels within each wind turbine
17 to one of two host computers (one located in each of the field workshops). Supervisory, Control
18 and Data Acquisition (SCADA) systems at each field workshop collect operating and
19 performance data from the turbines and the facility's met towers.

20 **Access Roads**

21 The facility includes up to 70 miles of new roads that provide access to the turbine
22 strings. The access roads connect to graveled turbine turnouts at the base of each turbine.

23 **Temporary Construction Areas**

24 During construction, the facility includes temporary laydown areas used to stage
25 construction and store supplies and equipment. The facility includes construction crane paths to
26 move construction cranes between turbine strings.

27 **2. Location of the Facility**

28 The facility is located in Morrow County and Gilliam County south of Interstate
29 Highway 84 and east of Arlington, Oregon, between State Highways 19 and 74. The northern
30 and southern areas of the site are linked by the Willow Creek Valley on the east and Eightmile
31 and Fourmile Canyons in the center. The facility is located entirely on private land subject to
long-term wind energy leases.

IV. CONDITIONS REQUIRED BY COUNCIL RULES

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

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

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

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

20 1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate
21 except as provided for in OAR Chapter 345, Division 27.

22 2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site to
23 the Department of Energy within 90 days after beginning operation of the facility. The legal
24 description required by this rule means a description of metes and bounds or a description
25 of the site by reference to a map and geographic data that clearly and specifically identifies
26 the outer boundaries that contain all parts of the facility.

27 3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire the
28 facility:

29 (a) Substantially as described in the site certificate;

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

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

34 4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of the
35 facility by the dates specified in the site certificate. (*See Conditions 24 and 25.*)

36 5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed
37 for wind energy facilities, transmission lines or pipelines under this section, the certificate
38 holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing
39 on any part of the site until the certificate holder has construction rights on all parts of the
40 site. For the purpose of this rule, "construction rights" means the legal right to engage in
41 construction activities. For wind energy facilities, transmission lines or pipelines, if the
42 certificate holder does not have construction rights on all parts of the site, the certificate
43 holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a

1 clearing on a part of the site if the certificate holder has construction rights on that part of
2 the site and:

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

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

10 6 OAR 345-027-0020(6): If the Council requires mitigation based on an affirmative finding
11 under any standards of Division 22 or Division 24 of this chapter, the certificate holder
12 shall consult with affected state agencies and local governments designated by the Council
13 and shall develop specific mitigation plans consistent with Council findings under the
14 relevant standards. The certificate holder must submit the mitigation plans to the Office and
15 receive Office approval before beginning construction or, as appropriate, operation of the
16 facility.

17 7 OAR 345-027-0020(7): The certificate holder shall prevent the development of any
18 conditions on the site that would preclude restoration of the site to a useful, non-hazardous
19 condition to the extent that prevention of such site conditions is within the control of the
20 certificate holder.

21 8 OAR 345-027-0020(8): Before beginning construction of the facility, the certificate holder
22 shall submit to the State of Oregon, through the Council, a bond or letter of credit, in a form
23 and amount satisfactory to the Council to restore the site to a useful, non-hazardous
24 condition. The certificate holder shall maintain a bond or letter of credit in effect at all
25 times until the facility has been retired. The Council may specify different amounts for the
26 bond or letter of credit during construction and during operation of the facility. (*See*
27 *Condition 30.*)

28 9 OAR 345-027-0020(9): The certificate holder shall retire the facility if the certificate holder
29 permanently ceases construction or operation of the facility. The certificate holder shall
30 retire the facility according to a final retirement plan approved by the Council, as described
31 in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a
32 useful, non-hazardous condition at the time of retirement, notwithstanding the Council's
33 approval in the site certificate of an estimated amount required to restore the site.

34 10 OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all
35 representations in the site certificate application and supporting record the Council deems to
36 be binding commitments made by the applicant.

37 11 OAR 345-027-0020(11): Upon completion of construction, the certificate holder shall
38 restore vegetation to the extent practicable and shall landscape all areas disturbed by
39 construction in a manner compatible with the surroundings and proposed use. Upon
40 completion of construction, the certificate holder shall remove all temporary structures not
41 required for facility operation and dispose of all timber, brush, refuse and flammable or
42 combustible material resulting from clearing of land and construction of the facility.

- 1 12 OAR 345-027-0020(12): The certificate holder shall design, engineer and construct the
2 facility to avoid dangers to human safety presented by seismic hazards affecting the site that
3 are expected to result from all maximum probable seismic events. As used in this rule
4 “seismic hazard” includes ground shaking, landslide, liquefaction, lateral spreading,
5 tsunami inundation, fault displacement and subsidence.
- 6 13 OAR 345-027-0020(13): The certificate holder shall notify the Department, the State
7 Building Codes Division and the Department of Geology and Mineral Industries promptly
8 if site investigations or trenching reveal that conditions in the foundation rocks differ
9 significantly from those described in the application for a site certificate. After the
10 Department receives the notice, the Council may require the certificate holder to consult
11 with the Department of Geology and Mineral Industries and the Building Codes Division
12 and to propose mitigation actions.
- 13 14 OAR 345-027-0020(14): The certificate holder shall notify the Department, the State
14 Building Codes Division and the Department of Geology and Mineral Industries promptly
15 if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity
16 of the site.
- 17 15 OAR 345-027-0020(15): Before any transfer of ownership of the facility or ownership of
18 the site certificate holder, the certificate holder shall inform the Department of the proposed
19 new owners. The requirements of OAR 345-027-0100 apply to any transfer of ownership
20 that requires a transfer of the site certificate.
- 21 16 OAR 345-027-0020(16): If the Council finds that the certificate holder has permanently
22 ceased construction or operation of the facility without retiring the facility according to a
23 final retirement plan approved by the Council, as described in OAR 345-027-0110, the
24 Council shall notify the certificate holder and request that the certificate holder submit a
25 proposed final retirement plan to the Office within a reasonable time not to exceed 90 days.
26 If the certificate holder does not submit a proposed final retirement plan by the specified
27 date, the Council may direct the Department to prepare a proposed final retirement plan for
28 the Council’s approval. Upon the Council’s approval of the final retirement plan, the
29 Council may draw on the bond or letter of credit described in OAR 345-027-0020(8) to
30 restore the site to a useful, non-hazardous condition according to the final retirement plan,
31 in addition to any penalties the Council may impose under OAR Chapter 345, Division 29.
32 If the amount of the bond or letter of credit is insufficient to pay the actual cost of
33 retirement, the certificate holder shall pay any additional cost necessary to restore the site to
34 a useful, non-hazardous condition. After completion of site restoration, the Council shall
35 issue an order to terminate the site certificate if the Council finds that the facility has been
36 retired according to the approved final retirement plan.
- 37 17 OAR 345-027-0023(4): If the facility includes any transmission line under Council
38 jurisdiction:
39 (a) The certificate holder shall design, construct and operate the transmission line in
40 accordance with the requirements of the National Electrical Safety Code (American
41 National Standards Institute, Section C2, 1997 Edition); and
42 (b) The certificate holder shall develop and implement a program that provides
43 reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or

1 structures of a permanent nature that could become inadvertently charged with electricity
2 are grounded or bonded throughout the life of the line.

3 18 OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a transmission line or
4 has, as a related or supporting facility, a pipeline or transmission line, the Council shall
5 specify an approved corridor in the site certificate and shall allow the certificate holder to
6 construct the pipeline or transmission line anywhere within the corridor, subject to the
7 conditions of the site certificate. If the applicant has analyzed more than one corridor in its
8 application for a site certificate, the Council may, subject to the Council's standards,
9 approve more than one corridor.

10 19 OAR 345-027-0028: The following general monitoring conditions apply:

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

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

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

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

28 20 OAR 345-026-0048: Following receipt of the site certificate or an amended site certificate,
29 the certificate holder shall implement a plan that verifies compliance with all site certificate
30 terms and conditions and applicable statutes and rules. As a part of the compliance plan, to
31 verify compliance with the requirement to begin construction by the date specified in the
32 site certificate, the certificate holder shall report promptly to the Department of Energy
33 when construction begins. Construction is defined in OAR 345-001-0010. In reporting the
34 beginning of construction, the certificate holder shall describe all work on the site
35 performed before beginning construction, including work performed before the Council
36 issued the site certificate, and shall state the cost of that work. For the purpose of this
37 exhibit, "work on the site" means any work within a site or corridor, other than surveying,
38 exploration or other activities to define or characterize the site or corridor. The certificate
39 holder shall document the compliance plan and maintain it for inspection by the
40 Department or the Council.

41 21 OAR 345-026-0080: The certificate holder shall report according to the following
42 requirements:

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

44 (i) Within six months after beginning construction, and every six months thereafter
45 during construction of the energy facility and related or supporting facilities, the certificate

1 holder shall submit a semiannual construction progress report to the Department of Energy.
2 In each construction progress report, the certificate holder shall describe any significant
3 changes to major milestones for construction. The certificate holder shall include such
4 information related to construction as specified in the site certificate. When the reporting
5 date coincides, the certificate holder may include the construction progress report within the
6 annual report described in OAR 345-026-0080.

7 (ii) By April 30 of each year after beginning construction, the certificate holder shall
8 submit an annual report to the Department addressing the subjects listed in OAR 345-026-
9 0080. The Council Secretary and the certificate holder may, by mutual agreement, change
10 the reporting date.

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

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

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

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

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

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

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

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

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

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

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

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

7 22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange
8 copies of all correspondence or summaries of correspondence related to compliance with
9 statutes, rules and local ordinances on which the Council determined compliance, except for
10 material withheld from public disclosure under state or federal law or under Council rules.
11 The certificate holder may submit abstracts of reports in place of full reports; however, the
12 certificate holder shall provide full copies of abstracted reports and any summarized
13 correspondence at the request of the Department.

14 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72
15 hours of any occurrence involving the facility if:

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

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

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

V. SPECIFIC FACILITY CONDITIONS

21 The conditions listed in this section include conditions based on representations in the
22 site certificate application and supporting record. These conditions are required under OAR 345-
23 027-0020(10). The certificate holder must comply with these conditions in addition to the
24 conditions listed in Section VI. This section includes other specific facility conditions the
25 Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345,
26 Divisions 22 and 24, and to protect the public health and safety. For conditions that require
27 subsequent review and approval of a future action, ORS 469.402 authorizes the Council to
28 delegate the future review and approval to the Department if, in the Council's discretion, the
29 delegation is warranted under the circumstances of the case.

1. Certificate Administration Conditions

30 24 The certificate holder shall begin construction of the facility within three years after the
31 effective date of the site certificate. Under OAR 345-015-0085(9), a site certificate is
32 effective upon execution by the Council Chair and the applicant. The Council may grant an
33 extension of the deadline to begin construction in accordance with OAR 345-027-0030 or
34 any successor rule in effect at the time the request for extension is submitted.

35 25 The certificate holder shall complete construction of the facility within six years after the
36 effective date of the site certificate. Construction is complete when: 1) the facility is
37 substantially complete as defined by the certificate holder's construction contract
38 documents, 2) acceptance testing has been satisfactorily completed and 3) the energy
39 facility is ready to begin continuous operation consistent with the site certificate. The
40 certificate holder shall promptly notify the Department of the date of completion of
41 construction. The Council may grant an extension of the deadline for completing

1 construction in accordance with OAR 345-027-0030 or any successor rule in effect at the
2 time the request for extension is submitted.

3 26 The certificate holder shall construct a facility substantially as described in the site
4 certificate and may select turbines of any type, subject to the following restrictions and
5 compliance with all other site certificate conditions. Before beginning construction, the
6 certificate holder shall provide to the Department a description of the turbine types selected
7 for the facility demonstrating compliance with this condition.

8 (a) The total number of turbines at the facility must not exceed 303 turbines.

9 (b) The combined peak generating capacity of the facility must not exceed 909
10 megawatts.

11 (c) The turbine hub height must not exceed 105 meters and the maximum blade tip height
12 must not exceed 150 meters.

13 (d) The minimum blade tip clearance must be 25 meters above ground.

14 (e) The maximum volume of concrete above three feet below grade in the turbine
15 foundations must not exceed 66 cubic yards.

16 (f) The maximum combined weight of metals in the tower (including ladders and
17 platforms) and nacelle must not exceed 393 U.S. tons per turbine.

18 (g) The certificate holder shall request an amendment of the site certificate to increase the
19 combined peak generating capacity of the facility beyond 909 megawatts, to increase the
20 number of wind turbines to more than 303 wind turbines or to install wind turbines with a
21 hub height greater than 105 meters, a blade tip height greater than 150 meters or a blade tip
22 clearance less than 25 meters above ground.

23 27 The certificate holder shall obtain all necessary federal, state and local permits or approvals
24 required for construction, operation and retirement of the facility or ensure that its
25 contractors obtain the necessary federal, state and local permits or approvals.

26 28 Before beginning construction, the certificate holder shall notify the Department in advance
27 of any work on the site that does not meet the definition of “construction” in ORS 469.300,
28 excluding surveying, exploration or other activities to define or characterize the site, and
29 shall provide to the Department a description of the work and evidence that its value is less
30 than \$250,000.

31 29 Before beginning construction and after considering all micrositing factors, the certificate
32 holder shall provide to the Department, to the Oregon Department of Fish and Wildlife
33 (ODFW) and to the Planning Directors of Morrow County and Gilliam County detailed
34 maps of the facility site, showing the final locations where the certificate holder proposes to
35 build facility components, and a table showing the acres of temporary and permanent
36 habitat impact by habitat category and subtype, similar to Table 12 in the Final Order on the
37 Application. The detailed maps of the facility site shall indicate the habitat categories of all
38 areas that would be affected during construction (similar to the maps labeled “ODFW-2” in
39 the site certificate application). In classifying the affected habitat into habitat categories, the
40 certificate holder shall consult with the ODFW. The certificate holder shall not begin
41 ground disturbance in an affected area until the habitat assessment has been approved by
42 the Department. The Department may employ a qualified contractor to confirm the habitat
43 assessment by on-site inspection.

1 30 Before beginning construction, the certificate holder shall submit to the State of Oregon
2 through the Council a bond or letter of credit in the amount described herein naming the
3 State of Oregon, acting by and through the Council, as beneficiary or payee. The initial
4 bond or letter of credit amount is either \$19.346 million (in 2007 dollars), to be adjusted to
5 the date of issuance as described in (b), or the amount determined as described in (a). The
6 certificate holder shall adjust the amount of the bond or letter of credit on an annual basis
7 thereafter as described in (b).

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

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

15 (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in
16 2007 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price
17 Deflator, Chain-Weight, as published in the Oregon Department of Administrative
18 Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the
19 "Index") and using the annual average index value for 2007 dollars and the quarterly index
20 value for the date of issuance of the new bond or letter of credit. If at any time the Index is
21 no longer published, the Council shall select a comparable calculation to adjust 2007 dollars
22 to present value.

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

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

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

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

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

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

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

38 31 If the certificate holder elects to use a bond to meet the requirements of Condition 30, the
39 certificate holder shall ensure that the surety is obligated to comply with the requirements
40 of applicable statutes, Council rules and this site certificate when the surety exercises any
41 legal or contractual right it may have to assume construction, operation or retirement of the
42 energy facility. The certificate holder shall also ensure that the surety is obligated to notify
43 the Council that it is exercising such rights and to obtain any Council approvals required by
44 applicable statutes, Council rules and this site certificate before the surety commences any
45 activity to complete construction, operate or retire the energy facility.

- 1 32 Before beginning construction, the certificate holder shall notify the Department of the
2 identity and qualifications of the major design, engineering and construction contractor(s)
3 for the facility. The certificate holder shall select contractors that have substantial
4 experience in the design, engineering and construction of similar facilities. The certificate
5 holder shall report to the Department any change of major contractors.
- 6 33 The certificate holder shall contractually require all construction contractors and
7 subcontractors involved in the construction of the facility to comply with all applicable
8 laws and regulations and with the terms and conditions of the site certificate. Such
9 contractual provisions shall not operate to relieve the certificate holder of responsibility
10 under the site certificate.
- 11 34 During construction, the certificate holder shall have a full-time, on-site assistant
12 construction manager who is qualified in environmental compliance to ensure compliance
13 with all site certificate conditions. The certificate holder shall notify the Department of the
14 name, telephone number and e-mail address of this person.
- 15 35 Within 72 hours after discovery of conditions or circumstances that may violate the terms
16 or conditions of the site certificate, the certificate holder shall report the conditions or
17 circumstances to the Department.

2. Land Use Conditions

- 18 36 The certificate holder shall consult with area landowners and lessees during construction
19 and operation of the facility and shall implement measures to reduce or avoid any adverse
20 impacts to farm practices on surrounding lands and to avoid any increase in farming costs.
- 21 37 The certificate holder shall design and construct the facility using the minimum land area
22 necessary for safe construction and operation. The certificate holder shall locate access
23 roads and temporary construction laydown and staging areas to minimize disturbance with
24 farming practices and, wherever feasible, shall place turbines and transmission
25 interconnection lines along the margins of cultivated areas to reduce the potential for
26 conflict with farm operations.
- 27 38 During construction and operation of the facility, the certificate holder shall implement a
28 plan to control the introduction and spread of noxious weeds. The certificate shall develop
29 the weed control plan consistent with the Gilliam County and Morrow County Weed
30 Control Programs.
- 31 39 Before beginning construction of the facility, the certificate holder shall record in the real
32 property records of Gilliam County a Covenant Not to Sue with regard to generally
33 accepted farming practices on adjacent farmland consistent with Gilliam County Zoning
34 Ordinance 7.020(T)(4)(a)(5).
- 35 40 The certificate holder shall construct all facility components in compliance with the
36 following setback requirements:
- 37 (a) All facility components must be at least 3,520 feet from the property line of properties
38 zoned residential use or designated in the Gilliam County Comprehensive Plan as
39 residential.
- 40 (b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of
41 110-percent of maximum blade tip height, measured from the centerline of the turbine

1 tower to the nearest edge of any public road right-of-way. The certificate holder shall
2 assume a minimum right-of-way width of 60 feet.

3 (c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of
4 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest
5 residence existing at the time of tower construction.

6 (d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of
7 110-percent of maximum blade tip height, measured from the centerline of the turbine
8 tower to the nearest boundary of the certificate holder's lease area.

9 41 Within 90 days after beginning operation, the certificate holder shall provide to the
10 Department and to the Planning Directors of Gilliam County and Morrow County the actual
11 latitude and longitude location or Stateplane NAD 83(91) coordinates of each turbine
12 tower, connecting lines and transmission lines. In addition, the certificate holder shall
13 provide to the Department and to the Planning Directors of Gilliam County and Morrow
14 County, a summary of as-built changes in the facility compared to the original plan, if any.

15 42 The certificate holder shall install gates on all private facility access roads in Gilliam
16 County, in accordance with Gilliam County Zoning Ordinance Section 7.020(T)(4)(d)(6).

3. Cultural Resource Conditions

17 43 Before beginning construction, the certificate holder shall provide to the Department a map
18 showing the final design locations of all components of the facility and areas that would be
19 temporarily disturbed during construction. In addition, the certificate holder shall comply
20 with the following requirements:

21 (a) The certificate holder shall avoid disturbance within a 30-meter buffer around the two
22 prehistoric archaeological sites and five historic-period archaeological sites identified by
23 AINW as "possibly eligible" for listing in the National Register of Historic Places (NRHP)
24 as described in the Final Order on the Application.

25 (b) The certificate holder shall avoid disturbance of the 36 stacked rock features
26 identified by AINW as "possibly eligible" for listing in the NRHP as described in the Final
27 Order on the Application and shall, to the extent practicable, maintain a 30-meter no-
28 construction buffer around these features. If a 30-meter buffer cannot be maintained, the
29 certificate holder shall consult with the State Historic Preservation Office (SHPO) and the
30 Department to determine appropriate action to preserve or document the feature.

31 (c) The certificate holder shall label "no entry" areas around all identified historic,
32 cultural or archaeological resource sites on construction maps and drawings, and if
33 construction activities will occur within 200 feet of an identified site, the certificate holder
34 shall flag a 30-meter buffer around the site.

35 (d) The certificate holder shall hire qualified personnel to conduct pre-construction field
36 investigation for historic, cultural or archaeological resources in any areas of potential
37 construction disturbance that AINW did not previously survey.

38 (e) The certificate holder shall provide written reports of the field investigation required
39 under (d) to the Department and to the SHPO. If any historic, cultural or archaeological
40 resources are found that the SHPO determines to be significant, the certificate holder shall
41 consult with the Department and the SHPO to develop plan to avoid disturbance of the
42 resources during construction and operation of the facility. The certificate holder shall

1 instruct all construction personnel to avoid areas where the resources were found and shall
2 implement other appropriate measures to protect the resources.

3 44 The certificate holder shall ensure that a qualified archeologist, as defined in OAR 736-051-
4 0070, instructs construction personnel in the identification of cultural materials and
5 avoidance of accidental damage to identified resource sites.

6 45 The certificate holder shall ensure that construction personnel cease all ground-disturbing
7 activities in the immediate area if any archaeological or cultural resources are found during
8 construction of the facility until a qualified archeologist can evaluate the significance of the
9 find. The certificate holder shall notify the Department and the State Historic Preservation
10 Office (SHPO) of the find. If the SHPO determines that the resource is significant, the
11 certificate holder shall make recommendations to the Council for mitigation, including
12 avoidance, field documentation and data recovery, in consultation with the Department,
13 SHPO, interested tribes and other appropriate parties. The certificate holder shall not restart
14 work in the affected area until the certificate holder has demonstrated to the Department
15 and the SHPO that it has complied with archaeological resource protection regulations.

16 46 In reference to the presumed alignments of the Oregon Trail described in the Final Order on
17 the Application, the certificate holder shall comply with the following requirements:

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

20 (b) The certificate holder shall not locate facility components on undeveloped land where
21 the trail alignment was marked by existing Oregon-California Trail Association markers as
22 described in the October 2007 Archaeological Investigations Northwest, Inc. report (No.
23 2012) on the Oregon Trail.

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

27 (d) The certificate holder shall ensure that construction personnel proceed carefully in the
28 vicinity of the presumed alignments of the Oregon Trail. If any intact physical evidence of
29 the trail is discovered, the certificate holder shall avoid any disturbance to the intact
30 segments, by redesign, re-engineering or restricting the area of construction activity. The
31 certificate holder shall promptly notify the SHPO and the Department of the discovery. The
32 certificate holder shall consult with the SHPO and the Department to determine appropriate
33 mitigation measures.

4. Geotechnical Conditions

34 47 Before beginning construction, the certificate holder shall conduct a site-specific
35 geotechnical investigation and shall report its findings to the Oregon Department of
36 Geology & Mineral Industries (DOGAMI) and the Department. The certificate holder shall
37 conduct the geotechnical investigation after consultation with DOGAMI and in general
38 accordance with DOGAMI open file report 00-04 "Guidelines for Engineering Geologic
39 Reports and Site-Specific Seismic Hazard Reports."

40 48 The certificate holder shall design and construct the facility in accordance with
41 requirements set forth by the State of Oregon's Building Code Division and any other
42 applicable codes and design procedures. The certificate holder shall design facility

1 structures to meet or exceed the minimum standards required by the 2003 International
2 Building Code.

3 49 The certificate holder shall design, engineer and construct the facility to avoid dangers to
4 human safety presented by non-seismic hazards. As used in this condition, “non-seismic
5 hazards” include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

6 50 The certificate holder shall handle hazardous materials used on the site in a manner that
7 protects public health, safety and the environment and shall comply with all applicable
8 local, state and federal environmental laws and regulations. The certificate holder shall not
9 store diesel fuel or gasoline on the facility site.

10 51 If a spill or release of hazardous material occurs during construction or operation of the
11 facility, the certificate holder shall notify the Department within 72 hours and shall clean up
12 the spill or release and dispose of any contaminated soil or other materials according to
13 applicable regulations. The certificate holder shall make sure that spill kits containing items
14 such as absorbent pads are located on equipment and at the field workshops. The certificate
15 holder shall instruct employees about proper handling, storage and cleanup of hazardous
16 materials.

17 52 During construction, the certificate holder shall ensure that construction personnel are
18 trained in fire prevention and response, that construction vehicles and equipment are
19 operated on graveled areas to the extent possible and that open flames, such as cutting
20 torches, are kept away from dry grass areas.

21 53 During operation, the certificate holder shall ensure that all on-site employees receive
22 annual fire prevention and response training, including tower rescue training, by qualified
23 instructors or members of the local fire districts. The certificate holder shall ensure that all
24 employees are instructed to keep vehicles on roads and off dry grassland, except when off-
25 road operation is required for emergency purposes. The certificate holder shall encourage
26 employees to become volunteer members of local fire departments and shall facilitate
27 appropriate training.

28 54 During construction and operation of the facility, the certificate holder shall ensure that the
29 field workshops and all service vehicles are equipped with shovels and portable fire
30 extinguishers of a 4A50BC or equivalent rating.

31 55 During construction and operation of the facility, the certificate holder shall develop and
32 implement fire safety plans in consultation with the local fire protection agencies (the North
33 Gilliam County Rural Fire Protection District and the Ione Rural Fire Protection District) to
34 minimize the risk of fire and to respond appropriately to any fires that occur on the facility
35 site. In developing the fire safety plans, the certificate holder shall take into account the dry
36 nature of the region and shall address risks on a seasonal basis. The certificate holder shall
37 meet annually with local fire protection agency personnel to discuss emergency planning
38 and shall invite local fire protection agency personnel to observe any emergency drill or
39 tower rescue training conducted at the facility.

40 56 Upon the beginning of operation of the facility, the certificate holder shall provide a site
41 plan to the local fire protection agencies (the North Gilliam County Rural Fire Protection

1 District and the Ione Rural Fire Protection District). The certificate holder shall indicate on
2 the site plan the identification number assigned to each turbine and the location of all
3 facility structures and shall provide an updated site plan if additional turbines or other
4 structures are later added to the facility. During operation, the certificate holder shall ensure
5 that appropriate fire protection agency personnel have an up-to-date list of the names and
6 telephone numbers of facility personnel available to respond on a 24-hour basis in case of
7 an emergency on the facility site.

8 57 Before beginning construction, the certificate holder shall submit a Notice of Proposed
9 Construction or Alteration to the Federal Aviation Administration (FAA) identifying the
10 proposed final locations of turbine towers and meteorological towers. The certificate holder
11 shall notify the Department of the FAA's response as soon as it has been received.

12 58 The certificate holder shall construct turbines on concrete foundations and shall surround
13 the base of each tower with a ten-foot pad area of washed crushed rock on all sides. The
14 certificate holder shall cover turbine pad areas with non-erosive, non-flammable material as
15 soon as possible following exposure during construction and shall maintain the pad area
16 covering during operation of the facility.

17 59 The certificate holder shall follow manufacturers' recommended handling instructions and
18 procedures to prevent damage to turbine or turbine tower components that could lead to
19 failure.

20 60 The certificate holder shall install and maintain self-monitoring devices on each turbine,
21 connected to a fault annunciation panel or supervisory control and data acquisition
22 (SCADA) system at the field workshops to alert operators to potentially dangerous
23 conditions. The certificate holder shall maintain automatic equipment protection features in
24 each turbine that would shut down the turbine and reduce the chance of a mechanical
25 problem causing a fire.

26 61 The certificate holder shall construct turbine towers with no exterior ladders or access to the
27 turbine blades and shall install locked tower access doors. The certificate holder shall keep
28 tower access doors locked at all times except when authorized personnel are present.

29 62 The certificate holder shall have an operational safety-monitoring program and shall inspect
30 all turbine and turbine tower components on a regular basis. The certificate holder shall
31 maintain or repair turbine and turbine tower components as necessary to protect public
32 safety.

33 63 For turbine types having pad-mounted step-up transformers, the certificate holder shall
34 install the transformers at the base of each tower in locked cabinets designed to protect the
35 public from electrical hazards and to avoid creation of artificial habitat for raptor prey.

36 64 To protect the public from electrical hazards, the certificate holder shall enclose the facility
37 substations with appropriate fencing and locked gates.

38 65 The certificate holder shall construct access roads with a finished width of approximately
39 18 feet, a compacted base of native soil and a gravel surface to a depth of four to six inches.

40 66 During construction, the certificate holder shall implement measures to reduce traffic
41 impacts, including:

1 (a) Providing notice to the City of Arlington Road Department, the Gilliam County Road
2 Department and the Gilliam County Sheriff's Office in advance of deliveries that could
3 cause traffic disruption in Arlington.

4 (b) Providing notice to the residents of Arlington in advance of deliveries that could
5 cause traffic disruption.

6 (c) Requiring flaggers to be at appropriate locations at appropriate times during
7 construction to direct traffic.

8 67 The certificate holder shall cooperate with the Gilliam County Road Department and the
9 Morrow County Public Works Department to ensure that any unusual damage or wear to
10 county roads that is caused by construction of the facility is repaired by the certificate
11 holder. Upon completion of construction, the certificate holder shall restore county roads to
12 pre-construction condition or better, to the satisfaction of the applicable county
13 departments. If required by Morrow County or Gilliam County, the certificate holder shall
14 post bonds to ensure funds are available to repair and maintain roads affected by the
15 proposed facility.

16 68 During construction, the certificate holder shall require that all on-site construction
17 contractors develop and implement a site health and safety plan that informs workers and
18 others on-site what to do in case of an emergency and that includes the locations of fire
19 extinguishers and nearby hospitals, important telephone numbers and first aid techniques.
20 The certificate holder shall ensure that construction contractors have personnel on-site who
21 are trained and equipped for tower rescue and who are first aid and CPR certified.

22 69 During operation, the certificate holder shall develop and implement a site health and safety
23 plan that informs employees and others on-site what to do in case of an emergency and that
24 includes the locations of fire extinguishers and nearby hospitals, important telephone
25 numbers and first aid techniques.

26 70 During construction and operation of the facility, the certificate holder shall provide for on-
27 site security and shall establish good communications between on-site security personnel
28 and local law enforcement agencies (Gilliam County Sheriff and Morrow County Sheriff).
29 During operation, the certificate holder shall ensure that appropriate law enforcement
30 agency personnel have an up-to-date list of the names and telephone numbers of facility
31 personnel available to respond on a 24-hour basis in case of an emergency on the facility
32 site.

33 71 The certificate holder shall notify the Department and the Planning Directors of Gilliam
34 County and Morrow County within 72 hours of any accidents including mechanical failures
35 on the site associated with construction or operation of the facility that may result in public
36 health and safety concerns.

6. Water, Soils, Streams & Wetlands Conditions

37 72 The certificate holder shall not build any roads or construct transmission line support poles
38 within Eightmile Creek or within a 10-foot buffer from the ordinary high water line of the
39 creek.

40 73 The certificate holder shall conduct all construction work in compliance with an Erosion
41 and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of
42 Environmental Quality and as required under the National Pollutant Discharge Elimination

1 System (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder
2 shall include in the ESCP any procedures necessary to meet local erosion and sediment
3 control requirements or storm water management requirements.

4 74 During construction, the certificate holder shall limit truck traffic to designated existing and
5 improved road surfaces to avoid soil compaction, to the extent practicable.

6 75 During construction, the certificate holder shall implement best management practices to
7 control any dust generated by construction activities, such as applying water to roads and
8 disturbed soil areas.

9 76 During construction, the certificate holder shall reduce temporary disturbance impacts by
10 making use of previously disturbed areas, including roadways and tracks, and by preserving
11 vegetation rootstalks by crushing, rather than scraping, vegetation in areas of temporary
12 disturbance.

13 77 During facility operation, the certificate holder shall routinely inspect and maintain all
14 roads, pads and trenched areas and, as necessary, maintain or repair erosion and sediment
15 control measures. The certificate holder shall restore areas that are temporarily disturbed
16 during facility maintenance or repair activities to pre-disturbance condition or better.

17 78 During facility operation, the certificate holder shall obtain water for on-site uses from two
18 wells, one at each field workshop, subject to compliance with applicable permit
19 requirements. The certificate holder shall not use more than a combined total of 5,000
20 gallons of water per day from the facility's on-site wells.

7. Transmission Line & EMF Conditions

21 79 The certificate holder shall install the 34.5-kV collector system underground to the extent
22 practicable. The certificate holder shall install underground lines at a minimum depth of
23 three feet. Based on geotechnical conditions or other engineering considerations, the
24 certificate holder may install segments of the collector system aboveground on single-pole,
25 cross-arm structures or understrung on the 230-kV transmission line support structures, but
26 the total length of aboveground segments installed on single-pole structures must not
27 exceed 28 miles.

28 80 The certificate holder shall ground appropriate sections of fencing that parallel transmission
29 lines to reduce the risk of shock from induced voltage. In particular, the certificate holder
30 shall ground appropriate sections of fencing located in the northern project area on the west
31 side of Eightmile Canyon if the certificate holder builds a parallel transmission line in that
32 location that could induce a voltage on the fence.

33 81 The certificate holder shall take reasonable steps to reduce or manage human exposure to
34 electromagnetic fields, including but not limited to:

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

37 (b) Constructing all aboveground 34.5-kV transmission lines with a minimum clearance
38 of 20 feet from the ground.

39 (c) Constructing all aboveground 230-kV transmission lines with a minimum clearance of
40 24 feet from the ground.

1 (d) Fencing the areas near the facility substations to ensure that substation equipment is
2 not accessible to the public.

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

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

8 82 In advance of, and during, preparation of detailed design drawings and specifications for
9 230-kV and 34.5-kV transmission lines, the certificate holder shall consult with the Utility
10 Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the
11 designs and specifications are consistent with applicable codes and standards.

8. Plants, Wildlife & Habitat Protection Conditions

12 83 The certificate holder shall conduct wildlife monitoring as described in the Wildlife
13 Monitoring and Mitigation Plan that is incorporated in the Final Order on the Application as
14 Attachment A and as amended from time to time.

15 84 The certificate holder shall restore areas disturbed by facility construction but not occupied
16 by permanent facility structures according to the methods and monitoring procedures
17 described in the Revegetation Plan that is incorporated in the Final Order on the
18 Application as Attachment B and as amended from time to time.

19 85 The certificate holder shall acquire the legal right to create, enhance, maintain and protect a
20 habitat mitigation area as long as the site certificate is in effect by means of an outright
21 purchase, conservation easement or similar conveyance and shall provide a copy of the
22 documentation to the Department. Within the habitat mitigation area, the certificate holder
23 shall improve the habitat quality as described in the Habitat Mitigation Plan that is
24 incorporated in the Final Order on the Application as Attachment C and as amended from
25 time to time.

26 86 The certificate holder shall avoid permanent and temporary disturbance to the areas
27 described in (a) through (g) and, during the times indicated, shall avoid construction
28 disturbance in the areas described in (h) and (i). The certificate holder shall flag these areas
29 for the duration of construction activities nearby and shall ensure that construction
30 personnel avoid disturbance of the areas. The avoidance areas are:

31 (a) All Category 1 and Category 2 habitat.

32 (b) Areas of Category 3 shrub-steppe habitat as described in the Final Order on the
33 Application, Section IV.4.(b)F, footnote number **Error! Bookmark not defined.**, including
34 eleven small areas of sage shrub-steppe habitat, one small area of purshia shrub-steppe
35 habitat and one small area of shrub-steppe rabbitbrush habitat.

36 (c) All seeps, riparian areas and vernal pools.

37 (d) All water sources for wildlife, including perennial and intermittent streams, stock
38 ponds and watering stations.

39 (e) All faces of bluffs or rock outcroppings.

40 (f) All trees or other structures that contain active raptor nests.

41 (g) For facility substations and field workshops, all Category 3 habitat.

1 (h) The area within 1,000 feet of Category 2 Washington ground squirrel (WGS) habitat
2 during the period in which the squirrels are active. To determine when the WGS are active,
3 the certificate holder shall hire a qualified independent professional biologist to monitor the
4 on-site colony within the Category 1 WGS habitat area described in the Final Order on the
5 Application. The biologist shall begin monitoring the colony on January 15 if construction
6 activity is occurring within 0.5 miles of the Category 2 WGS habitat at that time.
7 Otherwise, the biologist shall begin monitoring upon the start of construction activity
8 within 0.5 miles of the Category 2 WGS habitat at any time between January 15 and June
9 30. The biologist shall conduct weekly monitoring to detect signs of WGS activity. If signs
10 of WGS activity are observed, the certificate holder shall halt construction activities within
11 the avoidance area and shall notify the Department. The certificate holder shall flag the
12 avoidance area and ensure that construction personnel avoid disturbance of the area until
13 the biologist has determined that the WGS are no longer active. While the WGS are active,
14 the biologist may suspend weekly monitoring until May 1. The certificate holder may
15 resume construction activities within the avoidance area when the WGS are no longer
16 active, as determined by the absence of WGS activity during three consecutive weeks of
17 monitoring by the biologist.

18 (i) The area within 0.5 miles of Category 3 curlew nesting habitat and the area within 0.5
19 miles the BLM Horn Butte Wildlife Area during the nesting season (March 8 through June
20 15). Before beginning construction, the certificate holder shall provide to the Department a
21 map showing these avoidance areas relative to areas of potential construction disturbance.
22 The certificate holder may engage in construction activities in these areas at times other
23 than the nesting season.

24 87 The certificate holder shall microsite the facility in conformance with the industry's best
25 practices. The certificate holder shall follow the recommendations of a qualified wildlife
26 biologist to avoid building turbine towers in the following locations:

27 (a) Areas of increased risk to avian species due to constricted flight paths, such as narrow
28 ridge saddles and gaps between hilltops.

29 (b) Areas on slopes greater than 20 percent.

30 (c) Areas within a 250-foot setback from the bluff edge along the north site boundary.

31 (d) Areas within a 250-foot setback from bluff edges along the eastern site boundary
32 above the Willow Creek Valley.

33 88 During construction, the certificate holder shall avoid construction activities in areas around
34 active nests of the following species during the sensitive period, as provided in this
35 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

36 The certificate holder shall conduct pre-construction surveys, using a protocol approved by
37 the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any
38 active nests of these species within 0.5 miles of any areas that would be disturbed during
39 construction. The certificate holder shall search the scheduled construction areas and all
40 areas within 0.5 miles of the construction areas. If a nest is occupied by any of these species
41 after the beginning of the sensitive period, the certificate holder will flag the boundaries of

1 a 0.5-mile buffer area around the nest and shall instruct construction personnel to avoid
2 disturbance of the area. The certificate holder shall hire a qualified independent
3 professional biologist to observe the active nest sites during the sensitive period for signs of
4 disturbance and to notify the Department of any non-compliance with this condition. If the
5 biologist observes nest site abandonment or other adverse impact to nesting activity, the
6 certificate holder shall implement appropriate mitigation, in consultation with ODFW and
7 subject to the approval of the Department, unless the adverse impact is clearly shown to
8 have a cause other than construction activity. The certificate holder may begin or resume
9 construction activities within a buffer area before the ending day of the sensitive period if
10 any known nest site is not occupied by the early release date. If a nest site is occupied, then
11 the certificate holder may begin or resume construction before the ending day of the
12 sensitive period with the approval of ODFW, after the young are fledged. The certificate
13 holder shall use a protocol approved by ODFW to determine when the young are fledged
14 (the young are independent of the core nest site).

15 89 The certificate holder shall not remove any trees that are greater than three feet in height.

16 90 The certificate holder shall design all aboveground transmission line support structures
17 following the most current suggested practices for avian protection on power lines
18 published by the Avian Power Line Interaction Committee.

19 91 The certificate holder shall reduce the risk of injuries to avian species by:

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

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

24 (c) Avoiding installation of aboveground transmission lines across narrow saddles,
25 ravines and similar features and, where such crossings cannot be avoided, installing line-
26 markers to make the lines more visible to avian species.

27 92 The certificate holder shall impose and enforce construction and operation speed limits of 5
28 miles per hour on roads within 1,000 feet of Category 2 WGS habitat and 20 miles per hour
29 on all other facility roads and shall ensure that all construction and operations personnel are
30 instructed on the importance of cautious driving practices while on facility roads.

9. Visual Effects Conditions

31 93 To reduce the visual impact of the facility, the certificate holder shall:

32 (a) Mount nacelles on smooth, steel structures, painted uniformly in a matte-finish,
33 neutral white color.

34 (b) Paint substation structures in a neutral color to blend with the surrounding landscape.

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

36 (d) Use only those signs required for facility safety, required by law or otherwise required
37 by this site certificate, except that the certificate holder may erect a sign to identify the
38 facility near each field workshop, may paint turbine numbers on each tower and may allow
39 unobtrusive manufacturers' logos on turbine nacelles.

40 (e) Not locate any facility signs along Highway 74.

41 (f) Design signs in accordance with Gilliam County Zoning Ordinance Section 8.030 and
42 Morrow County Zoning Ordinance Section 4.070, as applicable.

1 (g) Maintain any signs allowed under this condition in good repair.

2 94 The certificate holder shall design and construct the field workshops to be generally
3 consistent with the character of similar buildings used by commercial farmers or ranchers in
4 the area and shall paint the buildings in a neutral color to blend with the surrounding
5 landscape.

6 95 The certificate holder shall not use exterior nighttime lighting except:

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

9 (b) Security lighting at the field workshops and substations, provided that such lighting is
10 shielded or downward-directed to reduce glare.

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

10. Noise Control Conditions

12 96 To reduce noise impacts at nearby residences, the certificate holder shall:

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

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

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

18 97 Before beginning construction, the certificate holder shall provide to the Department:

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

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

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

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

40 98 During operation, the certificate holder shall maintain a complaint response system to
41 address noise complaints. The certificate holder shall promptly notify the Department of
42 any complaints received regarding facility noise and of any actions taken by the certificate

1 holder to address those complaints. In response to a complaint from the owner of a noise
2 sensitive property regarding noise levels during operation of the SFWF, the Council may
3 require the certificate holder to monitor and record the statistical noise levels to verify that
4 the certificate holder is operating the facility in compliance with the noise control
5 regulations.

11. Waste Management Conditions

6 99 The certificate holder shall provide portable toilets for on-site sewage handling during
7 construction and shall ensure that they are pumped and cleaned regularly by a licensed
8 contractor who is qualified to pump and clean portable toilet facilities.

9 100 During operation, the certificate holder shall discharge sanitary wastewater generated at the
10 field workshops to licensed on-site septic systems in compliance with county permit
11 requirements. The certificate holder shall design each septic system for a discharge capacity
12 of less than 2,500 gallons per day.

13 101 The certificate holder shall implement a waste management plan during construction that
14 includes but is not limited to the following measures:

15 (a) Recycling steel and other metal scrap.

16 (b) Recycling wood waste.

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

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

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

24 (f) Discharging all concrete truck rinse water into foundation holes and completing truck
25 wash-down off-site.

26 102 The certificate holder shall implement a waste management plan during operation that
27 includes but is not limited to the following measures:

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

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

30 (c) Recycling used oil and hydraulic fluid.

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

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

VI. SUCCESSORS AND ASSIGNS

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

VII. SEVERABILITY AND CONSTRUCTION

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

VIII. GOVERNING LAW AND FORUM

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

IX. EXECUTION

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

10 **IN WITNESS WHEREOF**, this site certificate has been executed by the State of Oregon, acting
11 by and through its Energy Facility Siting Council, and by Caithness Shepherds Flat, LLC.

ENERGY FACILITY SITING COUNCIL

CAITHNESS SHEPHERDS FLAT, LLC

By: _____
Robert Shiprack, Chair
Oregon Energy Facility Siting Council

By: _____
Print: _____

Date: _____

Date: _____