

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

**Second Amended Site Certificate
for
Shepherds Flat North**

ISSUANCE DATES

Site Certificate	July 25, 2008
First Amended Site Certificate	March 12, 2010
Second Amended Site Certificate	December 20, 2019

The Oregon Energy Facility Siting Council

SECOND AMENDED SITE CERTIFICATE FOR SHEPHERDS FLAT NORTH

I. INTRODUCTION

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

7 The findings of fact, reasoning and conclusions of law underlying the terms and
8 conditions of this site certificate are set forth in the following documents, incorporated herein
9 by this reference: (a) the Council's *Final Order on the Application for the Shepherds Flat Wind*
10 *Farm* issued on July 25, 2008, (b) the *Final Order on Amendment #1 for the Shepherds Flat Wind*
11 *Farm*, (c) the *Final Order on Amendment #1 for Shepherds Flat North*, and (d) the *Final Order on*
12 *Amendment #2 for Shepherds Flat North*. In interpreting this amended site certificate, any
13 ambiguity will be clarified by reference to the following, in order of priority: (1) this Second
14 Amended Site Certificate, (2) the *Final Order on Amendment #2*, (3) the *Final Order on*
15 *Amendment #1*, (4) the *Final Order on Amendment #1 for the Shepherds Flat Wind Farm*, (5) the
16 *Final Order on the Application for the Shepherds Flat Wind Farm* and (6) the record of the
17 proceedings that led to the Final Orders on the Application and Amendment #1 for the
18 Shepherds Flat Wind Farm and to the *Final Order on Amendment #1 and #2*. [Amendment #1
19 (SFWF); Amendment #1; Amendment #2]

20 [Text added by Amendment #1 (SFWF) was removed by Amendment #1.]

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

II. SITE CERTIFICATION

- 23 1. To the extent authorized by state law and subject to the conditions set forth herein, the
24 State authorizes the certificate holder to construct, operate and retire a wind energy
25 facility, together with certain related or supporting facilities, at the site in Gilliam County,
26 Oregon, as described in Section III of this site certificate. ORS 469.401(1). [Amendment #1
27 (SFWF)]
- 28 2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in
29 effect on the date that termination is sought or until the site certificate is revoked under
30 ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that
31 revocation is ordered. ORS 469.401(1).
- 32 3. This site certificate does not address, and is not binding with respect to, matters that were
33 not addressed in the Council's Final Orders on the Application and Amendment #1 for the
34 Shepherds Flat Wind Farm and in the *Final Order on Amendment #1* and *Final Order on*
35 *Amendment #2*. Such matters include, but are not limited to: building code compliance,

1 wage, hour and other labor regulations, local government fees and charges and other
2 design or operational issues that do not relate to siting the facility (ORS 469.401(4)) and
3 permits issued under statutes and rules for which the decision on compliance has been
4 delegated by the federal government to a state agency other than the Council. 469.503(3).
5 [Amendment #1 (SFWF); Amendment #1; Amendment #2]

6 4. Both the State and the certificate holder shall abide by local ordinances, state law and the
7 rules of the Council in effect on the date this site certificate is executed. ORS 469.401(2). In
8 addition, upon a clear showing of a significant threat to public health, safety or the
9 environment that requires application of later-adopted laws or rules, the Council may
10 require compliance with such later-adopted laws or rules. ORS 469.401(2).

11 5. For a permit, license or other approval addressed in and governed by this site certificate,
12 the certificate holder shall comply with applicable state and federal laws adopted in the
13 future to the extent that such compliance is required under the respective state agency
14 statutes and rules. ORS 469.401(2).

15 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities
16 and political subdivisions in Oregon as to the approval of the site and the construction,
17 operation and retirement of the facility as to matters that are addressed in and governed by
18 this site certificate. ORS 469.401(3).

19 7. Each affected state agency, county, city and political subdivision in Oregon with authority to
20 issue a permit, license or other approval addressed in or governed by this site certificate
21 shall, upon submission of the proper application and payment of the proper fees, but
22 without hearings or other proceedings, issue such permit, license or other approval subject
23 only to conditions set forth in this site certificate. ORS 469.401(3).

24 8. After issuance of this site certificate, each state agency or local government agency that
25 issues a permit, license or other approval for the facility shall continue to exercise
26 enforcement authority over such permit, license or other approval. ORS 469.401(3).

27 9. After issuance of this site certificate, the Council shall have continuing authority over the
28 site and may inspect, or direct the Oregon Department of Energy (Department) to inspect,
29 or request another state agency or local government to inspect, the site at any time in order
30 to ensure that the facility is being operated consistently with the terms and conditions of
31 this site certificate. ORS 469.430.

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

32 The energy facility is an electric power generating facility that produces power from
33 wind energy. The facility consists of not more than 106 wind turbines. The energy facility is
34 described further in the *Final Order on Amendment #1 for the Shepherds Flat Wind Farm, Final*
35 *Order on Amendment #1, and in the Final Order on Amendment #2*. [Amendment #1 (SFWF);
36 Amendment #1; Amendment #2]

1 **Wind Turbine Repower**

2 Wind turbine repowering includes removal and replacement of wind turbine blades and
3 associated wind turbine components on up to 106 existing turbine towers. Wind turbine
4 repowering requires trucks, small cranes or telehandlers, and a track mounted crane. Trucks
5 deliver new wind turbine components to wind turbine pad sites, and transport the old
6 components offsite for proper disposal or recycling at a licensed facility. Once the new wind
7 turbines components are delivered via truck to each pad site, smaller cranes or telehandlers
8 unload and stage the components. A track mounted crane then mobilizes to the turbine pad
9 area, setting up on the access road adjacent the turbine, and lowers the old rotor down to the
10 pad site for disassembly, followed by the old gearbox. Once disassembled, the old components
11 are staged for truck removal. The track mounted crane then lifts the new gearbox and rotor
12 into place. Once, complete, the track mounted crane advances to the next wind turbine, and
13 the process is repeated.

14
15 The facility repower activity results in approximately 109 acres of temporary disturbance from
16 temporary access roads, road improvements and laydown areas. [Amendment #2]

(b) Related or Supporting Facilities

17 The facility includes the following related or supporting facilities described below and in
18 greater detail in the *Final Order on Amendment #1 for the Shepherds Flat Wind Farm* and in the
19 *Final Order on Amendment #1*:

- 20 • Power Collection System
- 21 • Collector Substation
- 22 • Meteorological towers
- 23 • Field workshop
- 24 • Control system
- 25 • Access roads
- 26 • Additional construction areas

27 [Amendment #1 (SFWF); Amendment #1]

28 **Power Collection System**

29 A power collection system operating at 34.5 kilovolts (kV) transports power from each
30 turbine to a collector substation. The collection system is installed underground at a depth of at
31 least three feet. [Amendment #1]

32 **Collector Substations and Interconnection**

33 The facility includes a collector substation. The facility includes a 230-kV transmission
34 line between the substation and the interconnection site. The interconnection site is located at
35 the Bonneville Power Administration Slatt Switching Station. [Amendment #1 (SFWF)]

36 **Meteorological Towers**

37 The facility includes two permanent meteorological (met) towers. [Amendment #1 (SFWF)]

1 **Field Workshop**

2 The facility includes a field workshop. Including fenced areas, the field workshop
3 occupies about 1.6 acres. [Amendment #1 (SFWF)]

4 **Control System**

5 A fiber optic communications network links the control panels within each wind turbine
6 to a host computer located in the field workshop. Supervisory, Control and Data Acquisition
7 (SCADA) systems at the field workshop collect operating and performance data from the
8 turbines and the facility's met towers. [Amendment #1 (SFWF)]

9 **Access Roads**

10 The facility includes up to 31 miles of new roads that provide access to the turbine
11 strings. The access roads connect to graveled turbine turnouts at the base of each turbine.
12 [Amendment #1 (SFWF)]

13 **Temporary Construction Areas**

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

2. Location of the Facility

17 The facility is located in Gilliam County south of Interstate Highway 84 and east of
18 Arlington, Oregon, between State Highways 19 and 74. The facility is located entirely on private
19 land subject to long-term wind energy leases. [Amendment #1 (SFWF)]

IV. CONDITIONS REQUIRED BY COUNCIL RULES

20 This section lists conditions required by OAR 345-025-0006 (Mandatory Conditions in
21 Site Certificates), OAR 345-025-0010 (Site Specific Conditions), OAR 345-025-0016 (Monitoring
22 and Mitigation Conditions) and OAR Chapter 345, Division 26 (Construction and Operation
23 Rules for Facilities). These conditions should be read together with the specific facility
24 conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter
25 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions, the
26 definitions in OAR 345-001-0010 apply.

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

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

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

11 1 The Council shall not change the conditions of the site certificate except as provided for in
12 OAR Chapter 345, Division 27.

13 2 The certificate holder shall submit a legal description of the site to the Department of
14 Energy within 90 days after beginning operation of the facility. The legal description
15 required by this rule means a description of metes and bounds or a description of the site
16 by reference to a map and geographic data that clearly and specifically identifies the outer
17 boundaries that contain all parts of the facility.

18 3 The certificate holder shall design, construct, operate and retire the facility:

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

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

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

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

26 5 Except as necessary for the initial survey or as otherwise allowed for wind energy facilities
27 or transmission lines under this section, the certificate holder shall not begin construction,
28 as defined in OAR 345-001-0010, or create a clearing on any part of the site until the
29 certificate holder has construction rights on all parts of the site. For the purpose of this
30 rule, "construction rights" means the legal right to engage in construction activities. For
31 wind energy facilities and transmission lines, if the certificate holder does not have
32 construction rights on all parts of the site, the certificate holder may nevertheless begin
33 construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if
34 the certificate holder has construction rights on that part of the site and:

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

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

1 6 If the Council requires mitigation based on an affirmative finding under any standards of
2 Division 22 or Division 24 of this chapter, the certificate holder shall consult with affected
3 state agencies and local governments designated by the Council and shall develop specific
4 mitigation plans consistent with Council findings under the relevant standards. The
5 certificate holder must submit the mitigation plans to the Office and receive Office
6 approval before beginning construction or, as appropriate, operation of the facility.

7 7 The certificate holder shall prevent the development of any conditions on the site that
8 would preclude restoration of the site to a useful, non-hazardous condition to the extent
9 that prevention of such site conditions is within the control of the certificate holder.

10 8 Before beginning construction of the facility, the certificate holder shall submit to the
11 State of Oregon, through the Council, a bond or letter of credit, in a form and amount
12 satisfactory to the Council to restore the site to a useful, non-hazardous condition. The
13 certificate holder shall maintain a bond or letter of credit in effect at all times until the
14 facility has been retired. The Council may specify different amounts for the bond or letter
15 of credit during construction and during operation of the facility. (See *Condition 30*.)

16 9 The certificate holder shall retire the facility if the certificate holder permanently ceases
17 construction or operation of the facility. The certificate holder shall retire the facility
18 according to a final retirement plan approved by the Council, as described in OAR 345-027-
19 0110. The certificate holder shall pay the actual cost to restore the site to a useful, non-
20 hazardous condition at the time of retirement, notwithstanding the Council's approval in
21 the site certificate of an estimated amount required to restore the site.

22 10 The Council shall include as conditions in the site certificate all representations in the site
23 certificate application and supporting record the Council deems to be binding
24 commitments made by the applicant.

25 11 Upon completion of construction, the certificate holder shall restore vegetation to the
26 extent practicable and shall landscape all areas disturbed by construction in a manner
27 compatible with the surroundings and proposed use. Upon completion of construction,
28 the certificate holder shall remove all temporary structures not required for facility
29 operation and dispose of all timber, brush, refuse and flammable or combustible material
30 resulting from clearing of land and construction of the facility.

31 12 The certificate holder shall design, engineer and construct the facility to avoid dangers to
32 human safety and the environment presented by seismic hazards affecting the site that
33 are expected to result from all maximum probable seismic events. As used in this rule
34 "seismic hazard" includes ground shaking, ground failure, landslide, liquefaction triggering
35 and consequences (including flow failure, settlement buoyancy, and lateral spreading),
36 cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure
37 interaction.

38 13 The certificate holder shall notify the Department, the State Building Codes Division and
39 the Department of Geology and Mineral Industries promptly if site investigations or
40 trenching reveal that conditions in the foundation rocks differ significantly from those
41 described in the application for a site certificate. After the Department receives the notice,

1 the Council may require the certificate holder to consult with the Department of Geology
2 and Mineral Industries and the Building Codes Division to propose and implement
3 corrective or mitigation actions.

4 14 The certificate holder shall notify the Department, the State Building Codes Division and
5 the Department of Geology and Mineral Industries promptly if shear zones, artesian
6 aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the
7 Department receives notice, the Council may require the certificate holder to consult with
8 the Department of Geology and Mineral Industries and the Building Codes Division to
9 propose and implement corrective or mitigation actions.

10 15 Before any transfer of ownership of the facility or ownership of the site certificate holder,
11 the certificate holder shall inform the Department of the proposed new owners. The
12 requirements of OAR 345-027-0100 apply to any transfer of ownership that requires a
13 transfer of the site certificate.

14 16 If the Council finds that the certificate holder has permanently ceased construction or
15 operation of the facility without retiring the facility according to a final retirement plan
16 approved by the Council, as described in OAR 345-027-0110, the Council shall notify the
17 certificate holder and request that the certificate holder submit a proposed final
18 retirement plan to the Office within a reasonable time not to exceed 90 days. If the
19 certificate holder does not submit a proposed final retirement plan by the specified date,
20 the Council may direct the Department to prepare a proposed final retirement plan for the
21 Council's approval. Upon the Council's approval of the final retirement plan, the Council
22 may draw on the bond or letter of credit described in OAR 345-027-0020(8) to restore the
23 site to a useful, non-hazardous condition according to the final retirement plan, in addition
24 to any penalties the Council may impose under OAR Chapter 345, Division 29. If the
25 amount of the bond or letter of credit is insufficient to pay the actual cost of retirement,
26 the certificate holder shall pay any additional cost necessary to restore the site to a useful,
27 non-hazardous condition. After completion of site restoration, the Council shall issue an
28 order to terminate the site certificate if the Council finds that the facility has been retired
29 according to the approved final retirement plan.

30 17 If the facility includes any transmission line under Council jurisdiction:
31 (a) The certificate holder shall design, construct and operate the transmission line in
32 accordance with the requirements of the National Electrical Safety Code (American
33 National Standards Institute, Section C2, 1997 Edition); and
34 (b) The certificate holder shall develop and implement a program that provides
35 reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or
36 structures of a permanent nature that could become inadvertently charged with electricity
37 are grounded or bonded throughout the life of the line.

38 18 If the proposed energy facility has, as a related or supporting facility, a transmission line,
39 the Council shall specify an approved corridor in the site certificate and shall allow the
40 certificate holder to construct the transmission line anywhere within the corridor, subject
41 to the conditions of the site certificate. If the applicant has analyzed more than one

1 corridor in its application for a site certificate, the Council may, subject to the Council's
2 standards, approve more than one corridor.

3 19 The following general monitoring conditions apply:

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

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

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

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

21 20 Following receipt of the site certificate or an amended site certificate, the certificate
22 holder shall implement a plan that verifies compliance with all site certificate terms and
23 conditions and applicable statutes and rules. As a part of the compliance plan, to verify
24 compliance with the requirement to begin construction by the date specified in the site
25 certificate, the certificate holder shall report promptly to the Department of Energy when
26 construction begins. Construction is defined in OAR 345-001-0010. In reporting the
27 beginning of construction, the certificate holder shall describe all work on the site
28 performed before beginning construction, including work performed before the Council
29 issued the site certificate, and shall state the cost of that work. For the purpose of this
30 exhibit, "work on the site" means any work within a site or corridor, other than surveying,
31 exploration or other activities to define or characterize the site or corridor. The certificate
32 holder shall document the compliance plan and maintain it for inspection by the
33 Department or the Council.

34 21 The certificate holder shall report according to the following requirements:

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

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

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

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

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

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

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

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

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

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

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

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

1 23 The certificate holder shall notify the Department of Energy within 72 hours of any
2 occurrence involving the facility if:
3 (a) There is an attempt by anyone to interfere with its safe operation;
4 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-
5 caused event such as a fire or explosion affects or threatens to affect the public health and
6 safety or the environment; or
7 (c) There is any fatal injury at the facility.

V. SPECIFIC FACILITY CONDITIONS

8 The conditions listed in this section include conditions based on representations in the
9 site certificate application and supporting record. These conditions are required under OAR
10 345-027-0020(10). The certificate holder must comply with these conditions in addition to the
11 conditions listed in Section VI. This section includes other specific facility conditions the Council
12 finds necessary to ensure compliance with the siting standards of OAR Chapter 345, Divisions
13 22 and 24, and to protect the public health and safety. For conditions that require subsequent
14 review and approval of a future action, ORS 469.402 authorizes the Council to delegate the
15 future review and approval to the Department if, in the Council's discretion, the delegation is
16 warranted under the circumstances of the case.

1. Certificate Administration Conditions

17 24 The certificate holder shall begin construction of the facility by July 25, 2011. The Council
18 may grant an extension of the deadline to begin construction in accordance with OAR 345-
19 027-0030 or any successor rule in effect at the time the request for extension is
20 submitted. [Amendment #1 (SFWF)]

21 25 The certificate holder shall complete construction of the facility by July 25, 2014.
22 Construction is complete when: 1) the facility is substantially complete as defined by the
23 certificate holder's construction contract documents, 2) acceptance testing has been
24 satisfactorily completed and 3) the energy facility is ready to begin continuous operation
25 consistent with the site certificate. The certificate holder shall promptly notify the
26 Department of the date of completion of construction. The Council may grant an
27 extension of the deadline for completing construction in accordance with OAR 345-027-
28 0030 or any successor rule in effect at the time the request for extension is submitted.
29 [Amendment #1 (SFWF)]

30 26 The certificate holder shall construct a facility substantially as described in the site
31 certificate and may select turbines of any type, subject to the following restrictions and
32 compliance with all other site certificate conditions. Before beginning construction, the
33 certificate holder shall provide to the Department a description of the turbine types
34 selected for the facility demonstrating compliance with this condition.
35 (a) The total number of turbines at the facility must not exceed 106 turbines.
36 (b) The turbine hub height must not exceed 105 meters and the maximum blade tip
37 height must not exceed 150 meters.

(c) The minimum blade tip clearance must be 25 meters above ground. Repowered turbines that comply with the setback requirements of Condition 110, must have a minimum blade tip clearance of 21.5 meters above ground.

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

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

(f) The certificate holder shall request an amendment of the site certificate to increase the number of wind turbines to more than 106 wind turbines or to install wind turbines with a hub height greater than 105 meters, a blade tip height greater than 150 meters or a blade tip clearance less than 21.5 meters above ground.

[Amendment #1 (SFWF); Amendment #2]

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

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

Before beginning construction and after considering all micrositing factors, the certificate holder shall provide to the Department, to the Oregon Department of Fish and Wildlife (ODFW) and to the Planning Director of Gilliam County detailed maps of the facility site, showing the final locations where the certificate holder proposes to build facility components, and a table showing the acres of temporary and permanent habitat impact by habitat category and subtype, similar to Table 7 in the Final Order on Amendment #1 for the Shepherds Flat Wind Farm. The detailed maps of the facility site shall indicate the habitat categories of all areas that would be affected during construction (similar to the maps labeled "ODFW-2" in the site certificate application for the Shepherds Flat Wind Farm). In classifying the affected habitat into habitat categories, the certificate holder shall consult with the ODFW. The certificate holder shall not begin ground disturbance in an affected area until the habitat assessment has been approved by the Department. The Department may employ a qualified contractor to confirm the habitat assessment by on-site inspection. [Amendment #1 (SFWF)]

Before beginning construction, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount is either \$7.443 million (1st Quarter 2010 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).

- (a) The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of the facility and turbine types selected by applying the unit costs and general costs illustrated in Table 1 in the Final Order on Amendment #1 for the Shepherds Flat Wind Farm and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department.
- (b) The certificate holder shall adjust the amount of the bond or letter of credit, using the following calculation and subject to approval by the Department:
 - (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in 3rd Quarter 2009 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the index value for 3rd Quarter 2009 dollars and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 3rd Quarter 2009 dollars to present value.
 - (ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.
 - (iii) Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration and project management costs and 10 percent of the adjusted Gross Cost (ii) for the adjusted future developments contingency.
 - (iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest \$1,000 to determine the adjusted financial assurance amount.
- (c) The certificate holder shall use a form of bond or letter of credit approved by the Council.
- (d) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
- (e) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.
- (f) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

[Amendment #1 (SFWF); Amendment #1]

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

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
24 with 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 Weed Control Program.
30 [Amendment #1 (SFWF)]

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
38 properties zoned residential use or designated in the Gilliam County Comprehensive
39 Plan as residential.

- (b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest edge of any public road right-of-way. The certificate holder shall assume a minimum right-of-way width of 60 feet.
- (c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest residence existing at the time of tower construction.
- (d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest boundary of the certificate holder's lease area, except as provided in (e).
- (e) The turbine tower setback distance described in (d) does not apply to one isolated area excluded from the certificate holder's lease with the landowner identified as "Area A" in the *Final Order on Amendment #1*.

[Amendment #1]

41 Within 90 days after beginning operation, the certificate holder shall provide to the Department and to the Planning Director of Gilliam County the actual latitude and longitude location or Stateplane NAD 83(91) coordinates of each turbine tower, connecting lines and transmission lines. In addition, the certificate holder shall provide to the Department and to the Planning Director of Gilliam County, a summary of as-built changes in the facility compared to the original plan, if any. [Amendment #1 (SFWF)]

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

3. Cultural Resource Conditions

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

- (a) The certificate holder shall avoid disturbance within a 30-meter buffer around the historic-period archaeological sites within the facility boundary identified by AINW as “possibly eligible” for listing in the National Register of Historic Places (NRHP) as described in the Final Order on the Application for the Shepherds Flat Wind Farm.
- (b) The certificate holder shall avoid disturbance of the stacked rock features within the facility boundary identified by AINW as “possibly eligible” for listing in the NRHP as described in the Final Order on the Application for the Shepherds Flat Wind Farm and shall, to the extent practicable, maintain a 30-meter no-construction buffer around these features. If a 30-meter buffer cannot be maintained, the certificate holder shall consult with the State Historic Preservation Office (SHPO) and the Department to determine appropriate action to preserve or document the feature.
- (c) The certificate holder shall label “no entry” areas around all identified historic, cultural or archaeological resource sites on construction maps and drawings, and if

1 construction activities will occur within 200 feet of an identified site, the certificate
2 holder shall flag a 30-meter buffer around the site.

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

6 (e) The certificate holder shall provide written reports of the field investigation required
7 under (d) to the Department and to the SHPO. If any historic, cultural or
8 archaeological resources are found that the SHPO determines to be significant, the
9 certificate holder shall consult with the Department and the SHPO to develop plan
10 to avoid disturbance of the resources during construction and operation of the
11 facility. The certificate holder shall instruct all construction personnel to avoid areas
12 where the resources were found and shall implement other appropriate measures
13 to protect the resources.

14 [Amendment #1 (SFWF)]

15 44 The certificate holder shall ensure that a qualified archeologist, as defined in OAR 736-
16 051-0070, instructs construction personnel in the identification of cultural materials and
17 avoidance of accidental damage to identified resource sites.

18 45 The certificate holder shall ensure that construction personnel cease all ground-disturbing
19 activities in the immediate area if any archaeological or cultural resources are found
20 during construction of the facility until a qualified archeologist can evaluate the
21 significance of the find. The certificate holder shall notify the Department and the State
22 Historic Preservation Office (SHPO) of the find. If the SHPO determines that the resource is
23 significant, the certificate holder shall make recommendations to the Council for
24 mitigation, including avoidance, field documentation and data recovery, in consultation
25 with the Department, SHPO, interested tribes and other appropriate parties. The
26 certificate holder shall not restart work in the affected area until the certificate holder has
27 demonstrated to the Department and the SHPO that it has complied with archaeological
28 resource protection regulations.

29 46 [Condition removed by Amendment #1 (SFWF)]

4. Geotechnical Conditions

30 47 Before beginning construction, the certificate holder shall conduct a site-specific
31 geotechnical investigation and shall report its findings to the Oregon Department of
32 Geology & Mineral Industries (DOGAMI) and the Department. The certificate holder shall
33 conduct the geotechnical investigation after consultation with DOGAMI and in general
34 accordance with DOGAMI open file report 00-04 "Guidelines for Engineering Geologic
35 Reports and Site-Specific Seismic Hazard Reports."

36 48 The certificate holder shall design and construct the facility in accordance with
37 requirements set forth by the State of Oregon's Building Code Division and any other
38 applicable codes and design procedures. The certificate holder shall design facility
39 structures to meet or exceed the minimum standards required by the 2003 International
40 Building Code.

1 49 The certificate holder shall design, engineer and construct the facility to avoid dangers to
2 human safety presented by non-seismic hazards. As used in this condition, "non-seismic
3 hazards" include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

4 50 The certificate holder shall handle hazardous materials used on the site in a manner that
5 protects public health, safety and the environment and shall comply with all applicable
6 local, state and federal environmental laws and regulations. The certificate holder shall
7 not store diesel fuel or gasoline on the facility site.

8 51 If a spill or release of hazardous material occurs during construction or operation of the
9 facility, the certificate holder shall notify the Department within 72 hours and shall clean
10 up the spill or release and dispose of any contaminated soil or other materials according to
11 applicable regulations. The certificate holder shall make sure that spill kits containing
12 items such as absorbent pads are located on equipment and at the field workshop. The
13 certificate holder shall instruct employees about proper handling, storage and cleanup of
14 hazardous materials. [Amendment #1 (SFWF)]

15 52 During construction, the certificate holder shall ensure that construction personnel are
16 trained in fire prevention and response, that construction vehicles and equipment are
17 operated on graveled areas to the extent possible and that open flames, such as cutting
18 torches, are kept away from dry grass areas.

19 53 During operation, the certificate holder shall ensure that all on-site employees receive
20 annual fire prevention and response training, including tower rescue training, by qualified
21 instructors or members of the local fire district. The certificate holder shall ensure that all
22 employees are instructed to keep vehicles on roads and off dry grassland, except when
23 off-road operation is required for emergency purposes. The certificate holder shall
24 encourage employees to become volunteer members of local fire departments and shall
25 facilitate appropriate training. [Amendment #1 (SFWF)]

26 54 During construction and operation of the facility, the certificate holder shall ensure that
27 the field workshop and all service vehicles are equipped with shovels and portable fire
28 extinguishers of a 4A5OBC or equivalent rating. [Amendment #1 (SFWF)]

29 55 During construction and operation of the facility, the certificate holder shall develop and
30 implement fire safety plans in consultation with the North Gilliam County Rural Fire
31 Protection District to minimize the risk of fire and to respond appropriately to any fires
32 that occur on the facility site. In developing the fire safety plans, the certificate holder
33 shall take into account the dry nature of the region and shall address risks on a seasonal
34 basis. The certificate holder shall meet annually with local fire protection agency
35 personnel to discuss emergency planning and shall invite local fire protection agency
36 personnel to observe any emergency drill or tower rescue training conducted at the
37 facility. [Amendment #1 (SFWF)]

38 56 Upon the beginning of operation of the facility, the certificate holder shall provide a site
39 plan to the North Gilliam County Rural Fire Protection District. The certificate holder shall

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

7 57 Before beginning construction, the certificate holder shall submit a Notice of Proposed
8 Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon
9 Department of Aviation identifying the proposed final locations of turbine towers and
10 meteorological towers. The certificate holder shall promptly notify the Department of the
11 responses from the FAA and the Oregon Department of Aviation. [Amendment #1 (SFWF)]

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
15 as 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 workshop to alert operators to potentially dangerous
23 conditions. The certificate holder shall maintain automatic equipment protection features
24 in each turbine that would shut down the turbine and reduce the chance of a mechanical
25 problem causing a fire. [Amendment #1 (SFWF)]

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

30 62 The certificate holder shall have an operational safety-monitoring program and shall
31 inspect all turbine and turbine tower components on a regular basis. All turbine and
32 turbine tower components will be inspected within 6 months of being repowered.
33 Following the inspection, the certificate holder shall submit a written report to the
34 Department describing the results of the turbine tower component inspection. The
35 certificate holder shall maintain or repair turbine and turbine tower components as
36 necessary to protect public safety. [Amendment #2]

37 63 For turbine types having pad-mounted step-up transformers, the certificate holder shall
38 install the transformers at the base of each tower in locked cabinets designed to protect
39 the public from electrical hazards and to avoid creation of artificial habitat for raptor prey.

1 64 To protect the public from electrical hazards, the certificate holder shall enclose the
2 facility substation with appropriate fencing and locked gates. [Amendment #1 (SFWF)]

3 65 The certificate holder shall construct access roads with a finished width of approximately
4 16 feet, a compacted base of native soil and a gravel surface to a depth of four to ten
5 inches.[Amendment #1 (SFWF); Amendment #1]

6 66 During construction, the certificate holder shall implement measures to reduce traffic
7 impacts, including:
8 (a) Providing notice to the City of Arlington Road Department, the Gilliam County Road
9 Department and the Gilliam County Sheriff's Office in advance of deliveries that
10 could cause traffic disruption in Arlington.
11 (b) Providing notice to the residents of Arlington in advance of deliveries that could
12 cause traffic disruption.
13 (c) Requiring flaggers to be at appropriate locations at appropriate times during
14 construction to direct traffic.

15 67 The certificate holder shall cooperate with the Gilliam County Road Department to ensure
16 that any unusual damage or wear to county roads that is caused by construction of the
17 facility is repaired by the certificate holder. Submittal to the Department of an executed
18 Road Use Agreement with Gilliam County shall constitute evidence of compliance with this
19 condition. Upon completion of construction, the certificate holder shall restore county
20 roads to pre-construction condition or better, to the satisfaction of the county Road
21 Department. If required by Gilliam County, the certificate holder shall post bonds to
22 ensure funds are available to repair and maintain roads affected by the proposed facility.
23 The certificate holder shall also coordinate with the Morrow County Road Department
24 regarding implementation of a similar Road Use agreement. The certificate holder must
25 submit evidence of compliance prior to construction of facility repowering as authorized
26 by site certificate Amendment #2. [Amendment #1 (SFWF); Amendment #2]

27 68 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
32 who are trained and equipped for tower rescue and who are first aid and CPR certified.

33 69 During operation, the certificate holder shall develop and implement a site health and
34 safety plan that informs employees and others on-site what to do in case of an emergency
35 and that includes the locations of fire extinguishers and nearby hospitals, important
36 telephone numbers and first aid techniques.

37 70 During construction and operation of the facility, the certificate holder shall provide for
38 on-site security and shall establish good communications between on-site security
39 personnel and the Gilliam County Sheriff's Office. During operation, the certificate holder
40 shall ensure that appropriate law enforcement agency personnel have an up-to-date list of

1 the names and telephone numbers of facility personnel available to respond on a 24-hour
2 basis in case of an emergency on the facility site. [Amendment #1 (SFWF)]

3 71 The certificate holder shall notify the Department and the Gilliam County Planning
4 Director within 72 hours of any accidents including mechanical failures on the site
5 associated with construction or operation of the facility that may result in public health
6 and safety concerns. [Amendment #1 (SFWF)]

6. Water, Soils, Streams & Wetlands Conditions

7 72 [Condition removed by Amendment #1 (SFWF)]

8 73 The certificate holder shall conduct all construction work, including the repowering
9 activities associated with RFA2, in compliance with an Erosion and Sediment Control Plan
10 (ESCP) satisfactory to the Oregon Department of Environmental Quality and as required
11 under the National Pollutant Discharge Elimination System (NPDES) Storm Water
12 Discharge General Permit #1200-C. The certificate holder shall include in the ESCP any
13 procedures necessary to meet local erosion and sediment control requirements or storm
14 water management requirements. [Amendment #2]

15 74 During construction, the certificate holder shall limit truck traffic to designated existing
16 and improved road surfaces to avoid soil compaction, to the extent practicable.

17 75 During construction, the certificate holder shall implement best management practices to
18 control any dust generated by construction activities, such as applying water to roads and
19 disturbed soil areas. [Amendment #2]

20 76 During construction, the certificate holder shall reduce temporary disturbance impacts by
21 making use of previously disturbed areas, including roadways and tracks, and by
22 preserving vegetation rootstalks by crushing, rather than scraping, vegetation in areas of
23 temporary disturbance. [Amendment #2]

24 77 During facility operation, the certificate holder shall routinely inspect and maintain all
25 roads, pads and trenched areas and, as necessary, maintain or repair erosion and
26 sediment control measures. The certificate holder shall restore areas that are temporarily
27 disturbed during facility maintenance or repair activities to pre-disturbance condition or
28 better. [Amendment #2]

29 78 During facility operation, the certificate holder shall obtain water for on-site uses from a
30 well at the field workshop, subject to compliance with applicable permit requirements.
31 The certificate holder shall not use more than 5,000 gallons of water per day from the
32 facility's on-site well. [Amendment #1 (SFWF)]

7. Transmission Line & EMF Conditions

33 79 The certificate holder shall install the 34.5-kV collector system underground. The
34 certificate holder shall install underground lines at a minimum depth of three feet.
35 [Amendment #1 (SFWF); Amendment #1]

1 80 The certificate holder shall ground appropriate sections of fencing that parallel
2 transmission lines to reduce the risk of shock from induced voltage. [Amendment #1 (SFWF)]

3 81 The certificate holder shall take reasonable steps to reduce or manage human exposure to
4 electromagnetic fields, including but not limited to:
5 (a) Constructing all aboveground transmission lines at least 200 feet from any residence
6 or other occupied structure, measured from the centerline of the transmission line.
7 (b) [Text removed by Amendment #1]
8 (c) Constructing all aboveground 230-kV transmission lines with a minimum clearance of
9 24 feet from the ground.
10 (d) Fencing the areas near the facility substation to ensure that substation equipment is
11 not accessible to the public.
12 (e) Providing to landowners a map of underground and overhead transmission lines on
13 their property and advising landowners of possible health risks.
14 (f) Designing and maintaining all transmission lines so that alternating current electric
15 fields do not exceed 9 kV per meter at one meter above the ground surface in areas
16 accessible to the public.

17 [Amendment #1 (SFWF); Amendment #1]

18 82 In advance of, and during, preparation of detailed design drawings and specifications for
19 230-kV and 34.5-kV transmission lines, the certificate holder shall consult with the Utility
20 Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the
21 designs and specifications are consistent with applicable codes and standards.

8. Plants, Wildlife & Habitat Protection Conditions

22 83 The certificate holder shall conduct wildlife monitoring as described in the Wildlife
23 Monitoring and Mitigation Plan that is incorporated in the Final Order on Amendment #1
24 for the Shepherds Flat Wind Farm as Attachment SFN-A and as amended from time to
25 time. [Amendment #1 (SFWF)]

26 84 The certificate holder shall restore areas disturbed by facility construction but not
27 occupied by permanent facility structures according to the methods and monitoring
28 procedures described in the Revegetation Plan that is incorporated in the Final Order on
29 Amendment #1 for the Shepherds Flat Wind Farm as Attachment SFN-B and as amended
30 from time to time. [Amendment #1 (SFWF)]

31 85 The certificate holder shall acquire the legal right to create, enhance, maintain and protect
32 a habitat mitigation area as long as the site certificate is in effect by means of an outright
33 purchase, conservation easement or similar conveyance and shall provide a copy of the
34 documentation to the Department. Within the habitat mitigation area, the certificate
35 holder shall improve the habitat quality as described in the Habitat Mitigation Plan that is
36 incorporated in the Final Order on Amendment #1 for the Shepherds Flat Wind Farm as
37 Attachment SFN-C and as amended from time to time. [Amendment #1 (SFWF)]

38 86 The certificate holder shall avoid permanent and temporary disturbance to the areas
39 described in (a) through (g) and, during the times indicated, shall avoid construction

disturbance in the areas described in (h) through (k). The certificate holder shall flag these areas for the duration of construction activities nearby and shall ensure that construction personnel avoid disturbance of the areas. The avoidance areas are:

- (a) All Category 1 habitat and those areas of Category 2 habitat shown on the "ODFW-2" Figures 1 through 12 in the Shepherds Flat Wind Farm Application. [Amendment #1 (SFWF)]
- (b) [text removed by Amendment #1 (SFWF)]
- (c) All seeps, riparian areas and vernal pools.
- (d) All water sources for wildlife, including perennial and intermittent streams, stock ponds and watering stations.
- (e) All faces of bluffs or rock outcroppings.
- (f) All trees or other structures that contain active raptor nests.
- (g) For the facility substation and field workshop, all Category 3 habitat. [Amendment #1 (SFWF)]
- (h) [text removed by Amendment #1 (SFWF)]
- (i) The area within 0.5 miles of Category 3 curlew nesting habitat and the area within 0.5 miles the BLM Horn Butte Wildlife Area during the nesting season (March 8 through June 15). Before beginning construction, the certificate holder shall provide to the Department a map showing these avoidance areas relative to areas of potential construction disturbance. The certificate holder may engage in construction activities in these areas at times other than the nesting season.
- (j) The area within 1,000 feet of any essential, limited and irreplaceable Washington ground squirrel (WGS) habitat within the new areas added to the site by Amendment #1 (excluding the areas within the site boundaries of Shepherds Flat North, Shepherds Flat Central and Shepherds Flat South as approved on September 11, 2009) during the period in which the squirrels are active. The certificate holder shall hire a qualified independent professional biologist to conduct pre-construction surveys for State-listed threatened, endangered or sensitive wildlife species in these new areas within 1,000 feet of any area potentially disturbed by facility construction. To determine whether WGS habitat exists and to determine whether WGS are active, the biologist shall search for WGS in suitable habitat using a two-survey protocol approved by the Oregon Department of Fish and Wildlife (ODFW). The certificate holder shall submit the results of the survey to ODFW and to the Department. If signs of WGS activity are observed, the certificate holder shall flag the avoidance area and ensure that construction personnel avoid disturbance of the area until the biologist has determined that the WGS are no longer active.
- (k) Areas within a suitable buffer around confirmed populations of Laurent's milk-vetch or any other State-listed threatened or endangered plant species within the new areas added to the site by Amendment #1 (excluding the area within the site boundaries of Shepherds Flat North, Shepherds Flat Central and Shepherds Flat South as approved on September 11, 2009). The certificate holder shall not install facility components or cause temporary disturbance within these areas. The certificate holder shall hire a qualified independent professional biologist to conduct pre-construction surveys for State-listed threatened or endangered plant species in

1 these new areas within 1,000 feet of any area potentially disturbed by facility
2 construction. The certificate holder shall submit the results of the survey to the
3 Department.

4 [Amendment #1]

5 87 The certificate holder shall microsite the facility in conformance with the industry's best
6 practices. The certificate holder shall follow the recommendations of a qualified wildlife
7 biologist to avoid building turbine towers in the following locations:

- 8 (a) Areas of increased risk to avian species due to constricted flight paths, such as
9 narrow ridge saddles and gaps between hilltops.
- 10 (b) Areas on slopes greater than 20 percent.
- 11 (c) Areas within a 250-foot setback from the bluff edge along the north site boundary.
- 12 (d) Areas within a 250-foot setback from bluff edges along the eastern site boundary
13 above the Willow Creek Valley.

14 88 During construction, the certificate holder shall avoid construction activities in areas
15 around active nests of the following species during the sensitive period, as provided in this
16 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

17 The certificate holder shall conduct pre-construction surveys, using a protocol approved
18 by the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are
19 any active nests of these species within 0.5 miles of any areas that would be disturbed
20 during construction. The certificate holder shall search the scheduled construction areas
21 and all areas within 0.5 miles of the construction areas. If a nest is occupied by any of
22 these species after the beginning of the sensitive period, the certificate holder will flag the
23 boundaries of a 0.5-mile buffer area around the nest and shall instruct construction
24 personnel to avoid disturbance of the area. The certificate holder shall hire a qualified
25 independent professional biologist to observe the active nest sites during the sensitive
26 period for signs of disturbance and to notify the Department of any non-compliance with
27 this condition. If the biologist observes nest site abandonment or other adverse impact to
28 nesting activity, the certificate holder shall implement appropriate mitigation, in
29 consultation with ODFW and subject to the approval of the Department, unless the
30 adverse impact is clearly shown to have a cause other than construction activity. The
31 certificate holder may begin or resume construction activities within a buffer area before
32 the ending day of the sensitive period if any known nest site is not occupied by the early
33 release date. If a nest site is occupied, then the certificate holder may begin or resume
34 construction before the ending day of the sensitive period with the approval of ODFW,
35 after the young are fledged. The certificate holder shall use a protocol approved by ODFW
36 to determine when the young are fledged (the young are independent of the core nest
37 site).

38 89 The certificate holder shall not remove any trees that are greater than three feet in height.

1 90 The certificate holder shall design all aboveground transmission line support structures
2 following the most current suggested practices for avian protection on power lines
3 published by the Avian Power Line Interaction Committee.

4 91 The certificate holder shall reduce the risk of injuries to avian species by:
5 (a) Installing turbine towers that are smooth steel structures that lack features that
6 would allow avian perching.
7 (b) Installing meteorological towers that are non-guyed structures to eliminate the risk
8 of avian collision with guy-wires.
9 (c) Avoiding installation of aboveground transmission lines across narrow saddles,
10 ravines and similar features and, where such crossings cannot be avoided, installing
11 line-markers to make the lines more visible to avian species.

12 92 The certificate holder shall impose and enforce construction and operation speed limits of
13 5 miles per hour on roads within 1,000 feet of Category 1 or Category 2 Washington
14 ground squirrel habitat identified in the preconstruction survey required under Condition
15 86 and 20 miles per hour on all other facility roads and shall ensure that all construction
16 and operations personnel are instructed on the importance of cautious driving practices
17 while on facility roads. [Amendment #1 (SFWF); Amendment #1]

9. Visual Effects Conditions

18 93 To reduce the visual impact of the facility, the certificate holder shall:
19 (a) Mount nacelles on smooth, steel structures, painted uniformly in a matte-finish,
20 neutral white color.
21 (b) Paint substation structures in a neutral color to blend with the surrounding
22 landscape.
23 (c) Not allow any advertising to be used on any part of the facility.
24 (d) Use only those signs required for facility safety, required by law or otherwise
25 required by this site certificate, except that the certificate holder may erect a sign to
26 identify the facility near the field workshop, may paint turbine numbers on each
27 tower and may allow unobtrusive manufacturers' logos on turbine nacelles.
28 (e) Not locate any facility signs along Highway 74.
29 (f) Design signs in accordance with Gilliam County Zoning Ordinance Section 8.030.
30 (g) Maintain any signs allowed under this condition in good repair.

31 [Amendment #1 (SFWF)]

32 94 The certificate holder shall design and construct the field workshop to be generally
33 consistent with the character of similar buildings used by commercial farmers or ranchers
34 in the area and shall paint the building in a neutral color to blend with the surrounding
35 landscape. [Amendment #1 (SFWF)]

36 95 The certificate holder shall not use exterior nighttime lighting except:
37 (a) The minimum turbine tower lighting required or recommended by the Federal
38 Aviation Administration.
39 (b) Security lighting at the field workshop and substation, provided that such lighting is
40 shielded or downward-directed to reduce glare.

- (c) Minimum lighting necessary for repairs or emergencies.
- (d) Minimum lighting necessary for nighttime construction. The certificate holder may use lighting only at the work location and only directed downward to illuminate the work area at the turbine base or upward from the base to illuminate the turbine tower; construction lighting shall not be directed outward. The certificate holder shall use nighttime lighting only with the approval of the owner of the property on which the work is conducted and shall provide notice of nighttime construction to occupants of all residences within one-half mile of the construction site.

[Amendment #1 (SFWF)]

10. Noise Control Conditions

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

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

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

- (a) Information that identifies the final design locations of all turbines to be built at the facility.
- (b) The maximum sound power level for the substation transformers and the maximum sound power level and octave band data for the turbines selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the Department.
- (c) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035 (1)(b)(B)(iii)(IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines and substation transformers) would meet the ambient degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.
- (d) For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035 (1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L_{10} and L_{50} by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

1 98 During operation, the certificate holder shall maintain a complaint response system to
2 address noise complaints. The certificate holder shall promptly notify the Department of
3 any complaints received regarding facility noise and of any actions taken by the certificate
4 holder to address those complaints. In response to a complaint from the owner of a noise
5 sensitive property regarding noise levels during operation of the facility, the Council may
6 require the certificate holder to monitor and record the statistical noise levels to verify
7 that the certificate holder is operating the facility in compliance with the noise control
8 regulations. [Amendment #1 (SFWF)]

11. Waste Management Conditions

9 99 The certificate holder shall provide portable toilets for on-site sewage handling during
10 construction and shall ensure that they are pumped and cleaned regularly by a licensed
11 contractor who is qualified to pump and clean portable toilet facilities.

12 100 During operation, the certificate holder shall discharge sanitary wastewater generated at
13 the field workshop to a licensed on-site septic system in compliance with county permit
14 requirements. The certificate holder shall design the septic system for a discharge capacity
15 of less than 2,500 gallons per day. [Amendment #1 (SFWF)]

16 101 The certificate holder shall implement a waste management plan during construction that
17 includes but is not limited to the following measures:

- 18 (a) Recycling steel and other metal scrap.
- 19 (b) Recycling wood waste.
- 20 (c) Recycling packaging wastes such as paper and cardboard.
- 21 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste
22 hauler or by using facility equipment and personnel to haul the waste.
- 23 (e) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent
24 materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for
25 disposal by a licensed firm specializing in the proper recycling or disposal of
26 hazardous wastes.
- 27 (f) Discharging all concrete truck rinse water into foundation holes and completing truck
28 wash-down off-site.

29 102 The certificate holder shall implement a waste management plan during operation that
30 includes but is not limited to the following measures:

- 31 (a) Training employees to minimize and recycle solid waste.
- 32 (b) Recycling paper products, metals, glass and plastics.
- 33 (c) Recycling used oil and hydraulic fluid.
- 34 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste
35 hauler or by using facility equipment and personnel to haul the waste.
- 36 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and oil-
37 absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium
38 batteries for disposal by a licensed firm specializing in the proper recycling or
39 disposal of hazardous wastes.

1 **103** Before beginning construction, the certificate holder shall determine whether any
2 construction disturbance would occur in locations not previously investigated for potential
3 jurisdictional waters as described in the *Final Order on Amendment #1*. The certificate
4 holder shall conduct pre-construction investigations in these new areas within 1,000 feet
5 of any area potentially disturbed by facility construction to determine whether any State-
6 jurisdictional waters exist in those locations. The certificate holder shall submit a written
7 report on the pre-construction investigation to the Department of Energy and to the
8 Department of State Lands for approval before beginning construction and shall ensure
9 that construction would have no impact on any jurisdictional water identified in the
10 report. [Amendment #1]

12. New Conditions applicable to RFA2 facility repower

11 **104** The certificate holder shall begin construction of the Shepherds Flat North facility
12 modifications, as approved in the Second Amended Site Certificate, within three years
13 after the effective date of the amended site certificate [TBD]. The certificate holder shall
14 notify the Department when construction of the facility modifications, as approved
15 in Request for Amendment 2, commences. Under OAR 345-015-0085(8), the amended site
16 certificate is effective upon execution by the Council Chair and the certificate holder.
17 [Amendment #2]

18 **105** The certificate holder shall complete construction of the Shepherds Flat North facility
19 modifications, as approved in the Second Amended Site Certificate, within three years
20 following the date of construction commencement [TBD]. The certificate holder shall
21 promptly notify the Department of the date of completion of construction of the
22 Shepherds Flat North facility modifications, as approved in Request for Amendment 2.
23 [Amendment #2]

24 **106** Prior to RFA2 facility repower activities, the certificate holder shall provide the
25 Department with the foundation uprate analysis on facility turbines. If the analysis results
26 identify necessary mitigation and remediation measures, or operational timing
27 recommendations, the certificate holder shall implement the identified measures and
28 recommendations prior to beginning the repowering activities unless otherwise approved
29 by the Department. [Amendment #2]

30 **107** Prior to RFA2 facility repower activities, the certificate holder shall coordinate with the
31 Gilliam County Weed Department and submit to the Department a Roadway Weed
32 Control Plan. The Department shall review and approve the plan, in consultation with the
33 Gilliam County Weed Department. The Roadway Weed Control Plan shall include, as
34 pertinent, but not be limited to, identification of county-listed weeds of economic
35 concern, methods for evaluating weeds within impact area, results of weed assessment,
36 control methods specific to roadway weed control and timing, agency consultation
37 protocol, and process for evaluating success of weed control.

38 [Amendment #2]

1 **108** The certificate holder shall:

2 (a) Prior to RFA2 facility repower activities:

3 i. Provide an updated habitat assessment of areas of disturbance, based on
4 a protocol approved by the Department in consultation with ODFW.

5 ii. Identify monitoring and reference sites, including sites within each
6 habitat category and subtype impacted, and the methodology utilized for
7 selecting the number of monitoring and reference sites should be
8 included.

9 iii. Consult with the Department, ODFW and Gilliam County Weed Control
10 Department on timing and methods for revegetation and weed control.

11 (b) Following completion of RFA2 facility repower activities:

12 i. Restore areas temporarily disturbed by RFA2 facility repower activities
13 according to the methods and monitoring procedures described in the
14 Revegetation Plan that is incorporated in the Final Order on Amendment
15 2 for Shepherds Flat North as Attachment D and as amended from time
16 to time.

17 ii. Consult with the Department, ODFW and Gilliam County Weed Control
18 Department on timing and methods for revegetation and weed control.

19 [Amendment #2]

20 **109** The certificate holder shall:

21 (a) Prior to RFA2 facility repower activities, the certificate holder shall conduct a pre-
22 construction raptor nest survey, using a protocol approved by the Oregon Department
23 of Fish and Wildlife (ODFW) to determine whether there are any active nests of state
24 sensitive species within 0.5 miles of any areas that would be disturbed.

25 (b) During RFA2 repower activities, if active raptor nests were identified within 0.5-mile of
26 RFA2 repower activities per (a) of this condition or become active during the sensitive
27 season, per (c) below, the certificate holder shall avoid construction activities within
28 0.25 mile buffer in areas around active nests of the following species during the
29 sensitive period, as provided in this condition:

Species	Sensitive Period	Early Release Date
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

31 (c) During RFA2 repower activities, if a nest becomes occupied by any of these species
32 after the beginning of the sensitive period, the certificate holder will flag the
33 boundaries of a 0.25-mile buffer area around the nest and shall instruct construction
34 personnel to avoid disturbance of the area.

1 (d) During RFA2 repower activities, if active nest sites are observed per (b) or (c) of this
2 condition, the certificate holder shall hire a qualified independent professional
3 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
5 the biologist observes nest site abandonment or other adverse impact to nesting
6 activity, the certificate holder shall implement appropriate mitigation, in consultation
7 with ODFW and subject to the approval of the Department, unless the adverse impact
8 is clearly shown to have a cause other than construction activity. The certificate holder
9 may begin or resume construction activities within a buffer area before the ending day
10 of the sensitive period if any known nest site is not occupied by the early release date.
11 If a nest site is occupied, then the certificate holder may begin or resume construction
12 before the ending day of the sensitive period with the approval of ODFW, after the
13 young are fledged. The certificate holder shall use a protocol approved by ODFW to
14 determine when the young are fledged (the young are independent of the core nest
15 site).

16 [Amendment 2]

17 110 Following completion of RFA2 facility repower activities, the certificate holder shall
18 conduct two years of fatality monitoring, as described in the *Wildlife Monitoring and*
19 *Mitigation Plan*, or based on protocol otherwise approved by the Department in
20 consultation with ODFW, that is incorporated in the *Final Order on Amendment #2* as
21 Attachment E as amended from time to time. [Amendment #2]

22 111 During RFA2 facility repower activities, the certificate holder shall, or ensure its third-
23 party contractors, reuse or recycle wind turbine blades, hubs and other removed wind
24 turbine components to the extent practicable. The certificate holder shall report in its
25 semi-annual report to the Department the quantities of removed wind turbine
26 components recycled, reused, sold for scrap, and disposed of in a landfill, to the extent
27 practicable. [Amendment 2]

28 112 Prior to the RFA2 facility repower activities, the certificate holder shall submit a Notice of
29 Proposed Construction or Alteration to the Federal Aviation Administration (FAA) and
30 the Oregon Department of Aviation identifying the new maximum blade tip height of
31 150 meters. The certificate holder shall promptly notify the Department of the
32 responses from the FAA and the Oregon Department of Aviation. [Amendment #2]

33 113 Prior to RFA2 facility repower activities, the certificate holder shall provide to the
34 Department:

- 35 a) The maximum sound power level and octave band for the modified wind
36 turbines based on manufacturer' warranties or confirmed by other means
37 acceptable to the Department.
- 38 b) If the information provided to the Department in (a) shows that the modified
39 (repowered) wind turbines would produce a higher maximum sound power level
40 and octave band than the currently installed wind turbines, the certificate holder
41 must conduct a noise analysis of the modified (repowered) turbines. If required,

1 the certificate holder must provide to the Department results of the noise
2 analysis for the proposed RFA2 facility repower, as approved in the Second
3 Amended Site Certificate, performed in a manner consistent with the
4 requirements of OAR 340-035-0035(1)(b)(B)(iii)(IV) and (VI) demonstrating to the
5 satisfaction of the Department that the total noise generated (including the
6 noise from repowered wind turbines and existing substation transformers)
7 would meet the ambient degradation test and maximum allowable test at the
8 appropriate measurement point for all potentially-affected noise sensitive
9 properties.

10 c) If the information provided to the Department in (a) shows that the modified
11 (repowered) wind turbines would produce a higher maximum sound power level
12 and octave band than the currently installed wind turbines, the certificate holder
13 must provide to the Department, for each noise-sensitive property where the
14 certificate holder relies on a noise waiver to demonstrate compliance in
15 accordance with OAR 340-035-0035 (1)(b)(B)(iii)(III) related to site certificate
16 Amendment #2 activities, a copy of the a legally effective easement or real
17 covenant pursuant to which the owner of the property authorizes the certificate
18 holder's operation of the facility to increase ambient statistical noise levels L10
19 and L50 by more than 10 dBA at the appropriate measurement point. The
20 easement must only be provided to the Department if the modified wind
21 turbines would produce a higher maximum sound power level and octave band
22 than the currently installed wind turbines and the current noise-easements do
23 not allow ambient statistical noise levels L10 and L50 by more than the statistical
24 noise levels anticipated to occur from the repowered turbines at the appropriate
25 measurement point. The legally-effective easement or real covenant must:
26 include a legal description of the burdened property (the noise sensitive
27 property); be recorded in the real property records of the county; expressly
28 benefit the certificate holder; expressly run with the land and bind all future
29 owners, lessees or holders of any interest in the burdened property; and not be
30 subject to revocation without the certificate holder's written approval.

31 [Amendment #2]

VI. SUCCESSORS AND ASSIGNS

32 To transfer this site certificate or any portion thereof or to assign or dispose of it in any
33 other manner, directly or indirectly, the certificate holder shall comply with OAR 345-027-0400.

VII. SEVERABILITY AND CONSTRUCTION

34 If any provision of this agreement and certificate is declared by a court to be illegal or in
35 conflict with any law, the validity of the remaining terms and conditions shall not be affected,
36 and the rights and obligations of the parties shall be construed and enforced as if the
37 agreement 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
3 Oregon.

4

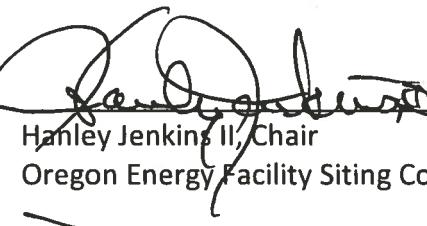
IX. EXECUTION AND EFFECTIVE DATE

1 This site certificate may be executed in counterparts and will become effective upon
2 signature by the Chair of the Energy Facility Siting Council and the authorized representative of
3 the certificate holder. [Amendment #1 (SFWF); Amendment #1; Amendment #2].

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

ENERGY FACILITY SITING COUNCIL

By:


Hanley Jenkins II, Chair
Oregon Energy Facility Siting Council

Date:

Dec. 20, 2019

NORTH HURLBURT WIND, LLC

By:


Print: Vandana Gupta

Date:

12.20.2019