

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

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

March 12, 2010

The Oregon Energy Facility Siting Council

FIRST AMENDED SITE CERTIFICATE FOR SHEPHERDS FLAT NORTH

I. INTRODUCTION

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

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 by
9 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*
11 *Wind Farm*, and (c) the *Final Order on Amendment #1*. In interpreting this site certificate, any
12 ambiguity will be clarified by reference to the following, in order of priority: (1) this First
13 Amended Site Certificate, (2) the *Final Order on Amendment #1*, (3) the *Final Order on*
14 *Amendment #1 for the Shepherds Flat Wind Farm*, (4) the *Final Order on the Application for the*
15 *Shepherds Flat Wind Farm* and (5) the record of the proceedings that led to the Final Orders on
16 the Application and Amendment #1 for the Shepherds Flat Wind Farm and to the *Final Order on*
17 *Amendment #1*. [Amendment #1 (SFWF); Amendment #1]

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

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

II. SITE CERTIFICATION

- 21 1. To the extent authorized by state law and subject to the conditions set forth herein, the State
22 authorizes the certificate holder to construct, operate and retire a wind energy facility,
23 together with certain related or supporting facilities, at the site in Gilliam County, Oregon, as
24 described in Section III of this site certificate. ORS 469.401(1). [Amendment #1 (SFWF)]
- 25 2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in
26 effect on the date that termination is sought or until the site certificate is revoked under ORS
27 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation
28 is ordered. ORS 469.401(1).
- 29 3. This site certificate does not address, and is not binding with respect to, matters that were not
30 addressed in the Council's Final Orders on the Application and Amendment #1 for the
31 Shepherds Flat Wind Farm and in the *Final Order on Amendment #1*. Such matters include,
32 but are not limited to: building code compliance, wage, hour and other labor regulations,
33 local government fees and charges and other design or operational issues that do not relate to
34 siting the facility (ORS 469.401(4)) and permits issued under statutes and rules for which the
35 decision on compliance has been delegated by the federal government to a state agency other
36 than the Council. 469.503(3). [Amendment #1 (SFWF); Amendment #1]

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

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

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

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

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

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

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

27 The energy facility is an electric power generating facility with an average electric
28 generating capacity of up to 106 megawatts and a peak generating capacity of not more than 318
29 megawatts that produces power from wind energy. The facility consists of not more than 106
30 wind turbines. The energy facility is described further in the *Final Order on Amendment #1 for*
31 *the Shepherds Flat Wind Farm* and in the *Final Order on Amendment #1*. [Amendment #1 (SFWF);
32 Amendment #1]

(b) Related or Supporting Facilities

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

36 · Power Collection System
37 · Collector Substation

1 · Meteorological towers
2 · Field workshop
3 · Control system
4 · Access roads
5 · Additional construction areas

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

7 **Power Collection System**

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

11 **Collector Substations and Interconnection**

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

15 **Meteorological Towers**

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

17 **Field Workshop**

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

20 **Control System**

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

25 **Access Roads**

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

29 **Temporary Construction Areas**

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

33 **2. Location of the Facility**

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

37 **IV. CONDITIONS REQUIRED BY COUNCIL RULES**

38 This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in
39 Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028

1 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation Rules
2 for Facilities). These conditions should be read together with the specific facility conditions
3 listed in Section V to ensure compliance with the siting standards of OAR Chapter 345,
4 Divisions 22 and 24, and to protect the public health and safety. In these conditions, the
5 definitions in OAR 345-001-0010 apply.

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

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

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

25 1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate
26 except as provided for in OAR Chapter 345, Division 27.

27 2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site to
28 the Department of Energy within 90 days after beginning operation of the facility. The legal
29 description required by this rule means a description of metes and bounds or a description
30 of the site by reference to a map and geographic data that clearly and specifically identifies
31 the outer boundaries that contain all parts of the facility.

32 3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire the
33 facility:

34 (a) Substantially as described in the site certificate;
35 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules,
36 and applicable state and local laws, rules and ordinances in effect at the time the site
37 certificate is issued; and
38 (c) In compliance with all applicable permit requirements of other state agencies.

39 4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of the
40 facility by the dates specified in the site certificate. (See *Conditions 24 and 25.*)

41 5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed
42 for wind energy facilities, transmission lines or pipelines under this section, the certificate
43 holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing

1 on any part of the site until the certificate holder has construction rights on all parts of the
2 site. For the purpose of this rule, “construction rights” means the legal right to engage in
3 construction activities. For wind energy facilities, transmission lines or pipelines, if the
4 certificate holder does not have construction rights on all parts of the site, the certificate
5 holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a
6 clearing on a part of the site if the certificate holder has construction rights on that part of
7 the site and:

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

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

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

22 7 OAR 345-027-0020(7): The certificate holder shall prevent the development of any
23 conditions on the site that would preclude restoration of the site to a useful, non-hazardous
24 condition to the extent that prevention of such site conditions is within the control of the
25 certificate holder.

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

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

39 10 OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all
40 representations in the site certificate application and supporting record the Council deems to
41 be binding commitments made by the applicant.

42 11 OAR 345-027-0020(11): Upon completion of construction, the certificate holder shall
43 restore vegetation to the extent practicable and shall landscape all areas disturbed by
44 construction in a manner compatible with the surroundings and proposed use. Upon

1 completion of construction, the certificate holder shall remove all temporary structures not
2 required for facility operation and dispose of all timber, brush, refuse and flammable or
3 combustible material resulting from clearing of land and construction of the facility.

4 12 **OAR 345-027-0020(12):** The certificate holder shall design, engineer and construct the
5 facility to avoid dangers to human safety presented by seismic hazards affecting the site that
6 are expected to result from all maximum probable seismic events. As used in this rule
7 “seismic hazard” includes ground shaking, landslide, liquefaction, lateral spreading,
8 tsunami inundation, fault displacement and subsidence.

9 13 **OAR 345-027-0020(13):** The certificate holder shall notify the Department, the State
10 Building Codes Division and the Department of Geology and Mineral Industries promptly
11 if site investigations or trenching reveal that conditions in the foundation rocks differ
12 significantly from those described in the application for a site certificate. After the
13 Department receives the notice, the Council may require the certificate holder to consult
14 with the Department of Geology and Mineral Industries and the Building Codes Division
15 and to propose mitigation actions.

16 14 **OAR 345-027-0020(14):** The certificate holder shall notify the Department, the State
17 Building Codes Division and the Department of Geology and Mineral Industries promptly
18 if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity
19 of the site.

20 15 **OAR 345-027-0020(15):** Before any transfer of ownership of the facility or ownership of
21 the site certificate holder, the certificate holder shall inform the Department of the proposed
22 new owners. The requirements of OAR 345-027-0100 apply to any transfer of ownership
23 that requires a transfer of the site certificate.

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

40 17 **OAR 345-027-0023(4):** If the facility includes any transmission line under Council
41 jurisdiction:

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

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

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

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

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

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

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

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

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

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

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

(i) Within six months after beginning construction, and every six months thereafter during construction of the energy facility and related or supporting facilities, the certificate holder shall submit a semiannual construction progress report to the Department of Energy. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall include such information related to construction as specified in the site certificate. When the reporting date coincides, the certificate holder may include the 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) Fuel Use: For thermal power plants:

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

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

(iv) 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.

(v) 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.

(vi) Compliance Report: A description of all instances of noncompliance with a site certificate condition. For ease of review, the certificate holder shall, in this section of the

1 report, use numbered subparagraphs corresponding to the applicable sections of the site
2 certificate.

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

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

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

16 23 **OAR 345-026-0170:** The certificate holder shall notify the Department of Energy within 72
17 hours of any occurrence involving the facility if:

- 18 (a) There is an attempt by anyone to interfere with its safe operation;
- 19 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused
20 event such as a fire or explosion affects or threatens to affect the public health and safety or
21 the environment; or
- 22 (c) There is any fatal injury at the facility.

V. SPECIFIC FACILITY CONDITIONS

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

1. Certificate Administration Conditions

32 24 The certificate holder shall begin construction of the facility by July 25, 2011. The Council
33 may grant an extension of the deadline to begin construction in accordance with OAR 345-
34 027-0030 or any successor rule in effect at the time the request for extension is submitted.
35 [Amendment #1 (SFWF)]

36 25 The certificate holder shall complete construction of the facility by July 25, 2014.
37 Construction is complete when: 1) the facility is substantially complete as defined by the
38 certificate holder's construction contract documents, 2) acceptance testing has been
39 satisfactorily completed and 3) the energy facility is ready to begin continuous operation
40 consistent with the site certificate. The certificate holder shall promptly notify the
41 Department of the date of completion of construction. The Council may grant an extension

1 of the deadline for completing construction in accordance with OAR 345-027-0030 or any
2 successor rule in effect at the time the request for extension is submitted. [Amendment #1
3 (SFWF)]

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

9 (a) The total number of turbines at the facility must not exceed 106 turbines.

10 (b) The combined peak generating capacity of the facility must not exceed 318
11 megawatts.

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

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

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

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

19 (g) The certificate holder shall request an amendment of the site certificate to increase the
20 combined peak generating capacity of the facility beyond 318 megawatts, to increase the
21 number of wind turbines to more than 106 wind turbines or to install wind turbines with a
22 hub height greater than 105 meters, a blade tip height greater than 150 meters or a blade tip
23 clearance less than 25 meters above ground.

24 [Amendment #1 (SFWF)]

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

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

33 29 Before beginning construction and after considering all micrositing factors, the certificate
34 holder shall provide to the Department, to the Oregon Department of Fish and Wildlife
35 (ODFW) and to the Planning Director of Gilliam County detailed maps of the facility site,
36 showing the final locations where the certificate holder proposes to build facility
37 components, and a table showing the acres of temporary and permanent habitat impact by
38 habitat category and subtype, similar to Table 7 in the Final Order on Amendment #1 for
39 the Shepherds Flat Wind Farm. The detailed maps of the facility site shall indicate the
40 habitat categories of all areas that would be affected during construction (similar to the
41 maps labeled "ODFW-2" in the site certificate application for the Shepherds Flat Wind
42 Farm). In classifying the affected habitat into habitat categories, the certificate holder shall
43 consult with the ODFW. The certificate holder shall not begin ground disturbance in an
44 affected area until the habitat assessment has been approved by the Department. The

1 Department may employ a qualified contractor to confirm the habitat assessment by on-site
2 inspection. [Amendment #1 (SFWF)]

3 30 Before beginning construction, the certificate holder shall submit to the State of Oregon
4 through the Council a bond or letter of credit in the amount described herein naming the
5 State of Oregon, acting by and through the Council, as beneficiary or payee. The initial
6 bond or letter of credit amount is either \$7.443 million (1st Quarter 2010 dollars), to be
7 adjusted to the date of issuance as described in (b), or the amount determined as described
8 in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an
9 annual basis thereafter as described in (b).

10 (a) The certificate holder may adjust the amount of the bond or letter of credit based on
11 the final design configuration of the facility and turbine types selected by applying the unit
12 costs and general costs illustrated in Table 1 in the Final Order on Amendment #1 for the
13 Shepherds Flat Wind Farm and calculating the financial assurance amount as described in
14 that order, adjusted to the date of issuance as described in (b) and subject to approval by the
15 Department.

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

18 (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in
19 3rd Quarter 2009 dollars) to present value, using the U.S. Gross Domestic Product Implicit
20 Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative
21 Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the
22 "Index") and using the index value for 3rd Quarter 2009 dollars and the quarterly index
23 value for the date of issuance of the new bond or letter of credit. If at any time the Index is
24 no longer published, the Council shall select a comparable calculation to adjust 3rd Quarter
25 2009 dollars to present value.

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

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

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

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

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

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

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

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

42 31 If the certificate holder elects to use a bond to meet the requirements of Condition 30, the
43 certificate holder shall ensure that the surety is obligated to comply with the requirements
44 of applicable statutes, Council rules and this site certificate when the surety exercises any
45 legal or contractual right it may have to assume construction, operation or retirement of the

1 energy facility. The certificate holder shall also ensure that the surety is obligated to notify
2 the Council that it is exercising such rights and to obtain any Council approvals required by
3 applicable statutes, Council rules and this site certificate before the surety commences any
4 activity to complete construction, operate or retire the energy facility.

5 32 Before beginning construction, the certificate holder shall notify the Department of the
6 identity and qualifications of the major design, engineering and construction contractor(s)
7 for the facility. The certificate holder shall select contractors that have substantial
8 experience in the design, engineering and construction of similar facilities. The certificate
9 holder shall report to the Department any change of major contractors.

10 33 The certificate holder shall contractually require all construction contractors and
11 subcontractors involved in the construction of the facility to comply with all applicable
12 laws and regulations and with the terms and conditions of the site certificate. Such
13 contractual provisions shall not operate to relieve the certificate holder of responsibility
14 under the site certificate.

15 34 During construction, the certificate holder shall have a full-time, on-site assistant
16 construction manager who is qualified in environmental compliance to ensure compliance
17 with all site certificate conditions. The certificate holder shall notify the Department of the
18 name, telephone number and e-mail address of this person.

19 35 Within 72 hours after discovery of conditions or circumstances that may violate the terms
20 or conditions of the site certificate, the certificate holder shall report the conditions or
21 circumstances to the Department.

2. Land Use Conditions

22 36 The certificate holder shall consult with area landowners and lessees during construction
23 and operation of the facility and shall implement measures to reduce or avoid any adverse
24 impacts to farm practices on surrounding lands and to avoid any increase in farming costs.

25 37 The certificate holder shall design and construct the facility using the minimum land area
26 necessary for safe construction and operation. The certificate holder shall locate access
27 roads and temporary construction laydown and staging areas to minimize disturbance with
28 farming practices and, wherever feasible, shall place turbines and transmission
29 interconnection lines along the margins of cultivated areas to reduce the potential for
30 conflict with farm operations.

31 38 During construction and operation of the facility, the certificate holder shall implement a
32 plan to control the introduction and spread of noxious weeds. The certificate shall develop
33 the weed control plan consistent with the Gilliam County Weed Control Program.
34 [Amendment #1 (SFWF)]

35 39 Before beginning construction of the facility, the certificate holder shall record in the real
36 property records of Gilliam County a Covenant Not to Sue with regard to generally
37 accepted farming practices on adjacent farmland consistent with Gilliam County Zoning
38 Ordinance 7.020(T)(4)(a)(5).

39 40 The certificate holder shall construct all facility components in compliance with the
40 following setback requirements:

- (a) All facility components must be at least 3,520 feet from the property line of properties zoned residential use or designated in the Gilliam County Comprehensive Plan as residential.
- (b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest edge of any public road right-of-way. The certificate holder shall assume a minimum right-of-way width of 60 feet.
- (c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest residence existing at the time of tower construction.
- (d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest boundary of the certificate holder's lease area, 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*.

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 holder
2 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 potential
5 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 archaeological
8 resources are found that the SHPO determines to be significant, the certificate holder shall
9 consult with the Department and the SHPO to develop plan to avoid disturbance of the
10 resources during construction and operation of the facility. The certificate holder shall
11 instruct all construction personnel to avoid areas where the resources were found and shall
12 implement other appropriate measures to protect the resources.

13 [Amendment #1 (SFWF)]

14 44 The certificate holder shall ensure that a qualified archeologist, as defined in OAR 736-051-
15 0070, instructs construction personnel in the identification of cultural materials and
16 avoidance of accidental damage to identified resource sites.

17 45 The certificate holder shall ensure that construction personnel cease all ground-disturbing
18 activities in the immediate area if any archaeological or cultural resources are found during
19 construction of the facility until a qualified archeologist can evaluate the significance of the
20 find. The certificate holder shall notify the Department and the State Historic Preservation
21 Office (SHPO) of the find. If the SHPO determines that the resource is significant, the
22 certificate holder shall make recommendations to the Council for mitigation, including
23 avoidance, field documentation and data recovery, in consultation with the Department,
24 SHPO, interested tribes and other appropriate parties. The certificate holder shall not restart
25 work in the affected area until the certificate holder has demonstrated to the Department
26 and the SHPO that it has complied with archaeological resource protection regulations.

27 46 [Condition removed by Amendment #1 (SFWF)]

4. Geotechnical Conditions

28 47 Before beginning construction, the certificate holder shall conduct a site-specific
29 geotechnical investigation and shall report its findings to the Oregon Department of
30 Geology & Mineral Industries (DOGAMI) and the Department. The certificate holder shall
31 conduct the geotechnical investigation after consultation with DOGAMI and in general
32 accordance with DOGAMI open file report 00-04 "Guidelines for Engineering Geologic
33 Reports and Site-Specific Seismic Hazard Reports."

34 48 The certificate holder shall design and construct the facility in accordance with
35 requirements set forth by the State of Oregon's Building Code Division and any other
36 applicable codes and design procedures. The certificate holder shall design facility
37 structures to meet or exceed the minimum standards required by the 2003 International
38 Building Code.

39 49 The certificate holder shall design, engineer and construct the facility to avoid dangers to
40 human safety presented by non-seismic hazards. As used in this condition, "non-seismic
41 hazards" include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

1 50 The certificate holder shall handle hazardous materials used on the site in a manner that
2 protects public health, safety and the environment and shall comply with all applicable
3 local, state and federal environmental laws and regulations. The certificate holder shall not
4 store diesel fuel or gasoline on the facility site.

5 51 If a spill or release of hazardous material occurs during construction or operation of the
6 facility, the certificate holder shall notify the Department within 72 hours and shall clean up
7 the spill or release and dispose of any contaminated soil or other materials according to
8 applicable regulations. The certificate holder shall make sure that spill kits containing items
9 such as absorbent pads are located on equipment and at the field workshop. The certificate
10 holder shall instruct employees about proper handling, storage and cleanup of hazardous
11 materials. [Amendment #1 (SFWF)]

12 52 During construction, the certificate holder shall ensure that construction personnel are
13 trained in fire prevention and response, that construction vehicles and equipment are
14 operated on graveled areas to the extent possible and that open flames, such as cutting
15 torches, are kept away from dry grass areas.

16 53 During operation, the certificate holder shall ensure that all on-site employees receive
17 annual fire prevention and response training, including tower rescue training, by qualified
18 instructors or members of the local fire district. The certificate holder shall ensure that all
19 employees are instructed to keep vehicles on roads and off dry grassland, except when off-
20 road operation is required for emergency purposes. The certificate holder shall encourage
21 employees to become volunteer members of local fire departments and shall facilitate
22 appropriate training. [Amendment #1 (SFWF)]

23 54 During construction and operation of the facility, the certificate holder shall ensure that the
24 field workshop and all service vehicles are equipped with shovels and portable fire
25 extinguishers of a 4A5OBC or equivalent rating. [Amendment #1 (SFWF)]

26 55 During construction and operation of the facility, the certificate holder shall develop and
27 implement fire safety plans in consultation with the North Gilliam County Rural Fire
28 Protection District to minimize the risk of fire and to respond appropriately to any fires that
29 occur on the facility site. In developing the fire safety plans, the certificate holder shall take
30 into account the dry nature of the region and shall address risks on a seasonal basis. The
31 certificate holder shall meet annually with local fire protection agency personnel to discuss
32 emergency planning and shall invite local fire protection agency personnel to observe any
33 emergency drill or tower rescue training conducted at the facility. [Amendment #1 (SFWF)]

34 56 Upon the beginning of operation of the facility, the certificate holder shall provide a site
35 plan to the North Gilliam County Rural Fire Protection District. The certificate holder shall
36 indicate on the site plan the identification number assigned to each turbine and the location
37 of all facility structures and shall provide an updated site plan if additional turbines or other
38 structures are later added to the facility. During operation, the certificate holder shall ensure
39 that appropriate fire protection agency personnel have an up-to-date list of the names and
40 telephone numbers of facility personnel available to respond on a 24-hour basis in case of
41 an emergency on the facility site. [Amendment #1 (SFWF)]

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

6 58 The certificate holder shall construct turbines on concrete foundations and shall surround
7 the base of each tower with a ten-foot pad area of washed crushed rock on all sides. The
8 certificate holder shall cover turbine pad areas with non-erosive, non-flammable material as
9 soon as possible following exposure during construction and shall maintain the pad area
10 covering during operation of the facility.

11 59 The certificate holder shall follow manufacturers' recommended handling instructions and
12 procedures to prevent damage to turbine or turbine tower components that could lead to
13 failure.

14 60 The certificate holder shall install and maintain self-monitoring devices on each turbine,
15 connected to a fault annunciation panel or supervisory control and data acquisition
16 (SCADA) system at the field workshop to alert operators to potentially dangerous
17 conditions. The certificate holder shall maintain automatic equipment protection features in
18 each turbine that would shut down the turbine and reduce the chance of a mechanical
19 problem causing a fire. [Amendment #1 (SFWF)]

20 61 The certificate holder shall construct turbine towers with no exterior ladders or access to the
21 turbine blades and shall install locked tower access doors. The certificate holder shall keep
22 tower access doors locked at all times except when authorized personnel are present.

23 62 The certificate holder shall have an operational safety-monitoring program and shall inspect
24 all turbine and turbine tower components on a regular basis. The certificate holder shall
25 maintain or repair turbine and turbine tower components as necessary to protect public
26 safety.

27 63 For turbine types having pad-mounted step-up transformers, the certificate holder shall
28 install the transformers at the base of each tower in locked cabinets designed to protect the
29 public from electrical hazards and to avoid creation of artificial habitat for raptor prey.

30 64 To protect the public from electrical hazards, the certificate holder shall enclose the facility
31 substation with appropriate fencing and locked gates. [Amendment #1 (SFWF)]

32 65 The certificate holder shall construct access roads with a finished width of approximately
33 16 feet, a compacted base of native soil and a gravel surface to a depth of four to ten inches.
34 [Amendment #1 (SFWF); Amendment #1]

35 66 During construction, the certificate holder shall implement measures to reduce traffic
36 impacts, including:
37 (a) Providing notice to the City of Arlington Road Department, the Gilliam County Road
38 Department and the Gilliam County Sheriff's Office in advance of deliveries that could
39 cause traffic disruption in Arlington.
40 (b) Providing notice to the residents of Arlington in advance of deliveries that could
41 cause traffic disruption.
42 (c) Requiring flaggers to be at appropriate locations at appropriate times during
43 construction to direct traffic.

1 67 The certificate holder shall cooperate with the Gilliam County Road Department to ensure
2 that any unusual damage or wear to county roads that is caused by construction of the
3 facility is repaired by the certificate holder. Upon completion of construction, the certificate
4 holder shall restore county roads to pre-construction condition or better, to the satisfaction
5 of the county Road Department. If required by Gilliam County, the certificate holder shall
6 post bonds to ensure funds are available to repair and maintain roads affected by the
7 proposed facility. [Amendment #1 (SFWF)]

8 68 During construction, the certificate holder shall require that all on-site construction
9 contractors develop and implement a site health and safety plan that informs workers and
10 others on-site what to do in case of an emergency and that includes the locations of fire
11 extinguishers and nearby hospitals, important telephone numbers and first aid techniques.
12 The certificate holder shall ensure that construction contractors have personnel on-site who
13 are trained and equipped for tower rescue and who are first aid and CPR certified.

14 69 During operation, the certificate holder shall develop and implement a site health and safety
15 plan that informs employees and others on-site what to do in case of an emergency and that
16 includes the locations of fire extinguishers and nearby hospitals, important telephone
17 numbers and first aid techniques.

18 70 During construction and operation of the facility, the certificate holder shall provide for on-
19 site security and shall establish good communications between on-site security personnel
20 and the Gilliam County Sheriff's Office. During operation, the certificate holder shall
21 ensure that appropriate law enforcement agency personnel have an up-to-date list of the
22 names and telephone numbers of facility personnel available to respond on a 24-hour basis
23 in case of an emergency on the facility site. [Amendment #1 (SFWF)]

24 71 The certificate holder shall notify the Department and the Gilliam County Planning Director
25 within 72 hours of any accidents including mechanical failures on the site associated with
26 construction or operation of the facility that may result in public health and safety concerns.
27 [Amendment #1 (SFWF)]

6. Water, Soils, Streams & Wetlands Conditions

28 72 [Condition removed by Amendment #1 (SFWF)]

29 73 The certificate holder shall conduct all construction work in compliance with an Erosion
30 and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of
31 Environmental Quality and as required under the National Pollutant Discharge Elimination
32 System (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder
33 shall include in the ESCP any procedures necessary to meet local erosion and sediment
34 control requirements or storm water management requirements.

35 74 During construction, the certificate holder shall limit truck traffic to designated existing and
36 improved road surfaces to avoid soil compaction, to the extent practicable.

37 75 During construction, the certificate holder shall implement best management practices to
38 control any dust generated by construction activities, such as applying water to roads and
39 disturbed soil areas.

40 76 During construction, the certificate holder shall reduce temporary disturbance impacts by
41 making use of previously disturbed areas, including roadways and tracks, and by preserving

1 vegetation rootstalks by crushing, rather than scraping, vegetation in areas of temporary
2 disturbance.

3 77 During facility operation, the certificate holder shall routinely inspect and maintain all
4 roads, pads and trenched areas and, as necessary, maintain or repair erosion and sediment
5 control measures. The certificate holder shall restore areas that are temporarily disturbed
6 during facility maintenance or repair activities to pre-disturbance condition or better.

7 78 During facility operation, the certificate holder shall obtain water for on-site uses from a
8 well at the field workshop, subject to compliance with applicable permit requirements. The
9 certificate holder shall not use more than 5,000 gallons of water per day from the facility's
10 on-site well. [Amendment #1 (SFWF)]

7. Transmission Line & EMF Conditions

11 79 The certificate holder shall install the 34.5-kV collector system underground. The
12 certificate holder shall install underground lines at a minimum depth of three feet.
13 [Amendment #1 (SFWF); Amendment #1]

14 80 The certificate holder shall ground appropriate sections of fencing that parallel transmission
15 lines to reduce the risk of shock from induced voltage. [Amendment #1 (SFWF)]

16 81 The certificate holder shall take reasonable steps to reduce or manage human exposure to
17 electromagnetic fields, including but not limited to:

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

20 (b) [Text removed by Amendment #1]

21 (c) Constructing all aboveground 230-kV transmission lines with a minimum clearance of
22 24 feet from the ground.

23 (d) Fencing the areas near the facility substation to ensure that substation equipment is
24 not accessible to the public.

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

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

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

31 82 In advance of, and during, preparation of detailed design drawings and specifications for
32 230-kV and 34.5-kV transmission lines, the certificate holder shall consult with the Utility
33 Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the
34 designs and specifications are consistent with applicable codes and standards.

8. Plants, Wildlife & Habitat Protection Conditions

35 83 The certificate holder shall conduct wildlife monitoring as described in the Wildlife
36 Monitoring and Mitigation Plan that is incorporated in the Final Order on Amendment #1
37 for the Shepherds Flat Wind Farm as Attachment SFN-A and as amended from time to
38 time. [Amendment #1 (SFWF)]

1 84 The certificate holder shall restore areas disturbed by facility construction but not occupied
2 by permanent facility structures according to the methods and monitoring procedures
3 described in the Revegetation Plan that is incorporated in the Final Order on Amendment
4 #1 for the Shepherds Flat Wind Farm as Attachment SFN-B and as amended from time to
5 time. [Amendment #1 (SFWF)]

6 85 The certificate holder shall acquire the legal right to create, enhance, maintain and protect a
7 habitat mitigation area as long as the site certificate is in effect by means of an outright
8 purchase, conservation easement or similar conveyance and shall provide a copy of the
9 documentation to the Department. Within the habitat mitigation area, the certificate holder
10 shall improve the habitat quality as described in the Habitat Mitigation Plan that is
11 incorporated in the Final Order on Amendment #1 for the Shepherds Flat Wind Farm as
12 Attachment SFN-C and as amended from time to time. [Amendment #1 (SFWF)]

13 86 The certificate holder shall avoid permanent and temporary disturbance to the areas
14 described in (a) through (g) and, during the times indicated, shall avoid construction
15 disturbance in the areas described in (h) through (k). The certificate holder shall flag these
16 areas for the duration of construction activities nearby and shall ensure that construction
17 personnel avoid disturbance of the areas. The avoidance areas are:

18 (a) All Category 1 habitat and those areas of Category 2 habitat shown on the “ODFW-2”
19 Figures 1 through 12 in the Shepherds Flat Wind Farm Application. [Amendment #1 (SFWF)]

20 (b) [text removed by Amendment #1 (SFWF)]

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

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

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

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

26 (g) For the facility substation and field workshop, all Category 3 habitat. [Amendment #1
27 (SFWF)]

28 (h) [text removed by Amendment #1 (SFWF)]

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

35 (j) The area within 1,000 feet of any essential, limited and irreplaceable Washington
36 ground squirrel (WGS) habitat within the new areas added to the site by Amendment #1
37 (excluding the areas within the site boundaries of Shepherds Flat North, Shepherds Flat
38 Central and Shepherds Flat South as approved on September 11, 2009) during the period in
39 which the squirrels are active. The certificate holder shall hire a qualified independent
40 professional biologist to conduct pre-construction surveys for State-listed threatened,
41 endangered or sensitive wildlife species in these new areas within 1,000 feet of any area
42 potentially disturbed by facility construction. To determine whether WGS habitat exists and
43 to determine whether WGS are active, the biologist shall search for WGS in suitable habitat
44 using a two-survey protocol approved by the Oregon Department of Fish and Wildlife
45 (ODFW). The certificate holder shall submit the results of the survey to ODFW and to the
46 Department. If signs of WGS activity are observed, the certificate holder shall flag the

1 avoidance area and ensure that construction personnel avoid disturbance of the area until
2 the biologist has determined that the WGS are no longer active.

3 (k) Areas within a suitable buffer around confirmed populations of Laurent's milk-vetch
4 or any other State-listed threatened or endangered plant species within the new areas added
5 to the site by Amendment #1 (excluding the area within the site boundaries of Shepherds
6 Flat North, Shepherds Flat Central and Shepherds Flat South as approved on September 11,
7 2009). The certificate holder shall not install facility components or cause temporary
8 disturbance within these areas. The certificate holder shall hire a qualified independent
9 professional biologist to conduct pre-construction surveys for State-listed threatened or
10 endangered plant species in these new areas within 1,000 feet of any area potentially
11 disturbed by facility construction. The certificate holder shall submit the results of the
12 survey to the Department.

13 [Amendment #1]

14 87 The certificate holder shall microsite the facility in conformance with the industry's best
15 practices. The certificate holder shall follow the recommendations of a qualified wildlife
16 biologist to avoid building turbine towers in the following locations:

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

23 88 During construction, the certificate holder shall avoid construction activities in areas around
24 active nests of the following species during the sensitive period, as provided in this
25 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

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

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

5 89 The certificate holder shall not remove any trees that are greater than three feet in height.

6 90 The certificate holder shall design all aboveground transmission line support structures
7 following the most current suggested practices for avian protection on power lines
8 published by the Avian Power Line Interaction Committee.

9 91 The certificate holder shall reduce the risk of injuries to avian species by:

- 10 (a) Installing turbine towers that are smooth steel structures that lack features that would
11 allow avian perching.
- 12 (b) Installing meteorological towers that are non-guyed structures to eliminate the risk of
13 avian collision with guy-wires.
- 14 (c) Avoiding installation of aboveground transmission lines across narrow saddles,
15 ravines and similar features and, where such crossings cannot be avoided, installing line-
16 markers to make the lines more visible to avian species.

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

9. Visual Effects Conditions

23 93 To reduce the visual impact of the facility, the certificate holder shall:

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

35 [Amendment #1 (SFWF)]

36 94 The certificate holder shall design and construct the field workshop to be generally
37 consistent with the character of similar buildings used by commercial farmers or ranchers in
38 the area and shall paint the building in a neutral color to blend with the surrounding
39 landscape. [Amendment #1 (SFWF)]

40 95 The certificate holder shall not use exterior nighttime lighting except:

- (a) The minimum turbine tower lighting required or recommended by the Federal Aviation Administration.
- (b) Security lighting at the field workshop and substation, provided that such lighting is 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.

98 During operation, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall promptly notify the Department of

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

11. Waste Management Conditions

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

10 100 During operation, the certificate holder shall discharge sanitary wastewater generated at the
11 field workshop to a licensed on-site septic system in compliance with county permit
12 requirements. The certificate holder shall design the septic system for a discharge capacity
13 of less than 2,500 gallons per day. [Amendment #1 (SFWF)]

14 101 The certificate holder shall implement a waste management plan during construction that
15 includes but is not limited to the following measures:
16 (a) Recycling steel and other metal scrap.
17 (b) Recycling wood waste.
18 (c) Recycling packaging wastes such as paper and cardboard.
19 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste
20 hauler or by using facility equipment and personnel to haul the waste.
21 (e) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent
22 materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for
23 disposal by a licensed firm specializing in the proper recycling or disposal of hazardous
24 wastes.
25 (f) Discharging all concrete truck rinse water into foundation holes and completing truck
26 wash-down off-site.

27 102 The certificate holder shall implement a waste management plan during operation that
28 includes but is not limited to the following measures:
29 (a) Training employees to minimize and recycle solid waste.
30 (b) Recycling paper products, metals, glass and plastics.
31 (c) Recycling used oil and hydraulic fluid.
32 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste
33 hauler or by using facility equipment and personnel to haul the waste.
34 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and oil-
35 absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries
36 for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous
37 wastes.

38 103 Before beginning construction, the certificate holder shall determine whether any
39 construction disturbance would occur in locations not previously investigated for potential
40 jurisdictional waters as described in the *Final Order on Amendment #1*. The certificate
41 holder shall conduct pre-construction investigations in these new areas within 1,000 feet of
42 any area potentially disturbed by facility construction to determine whether any State-

1 jurisdictional waters exist in those locations. The certificate holder shall submit a written
2 report on the pre-construction investigation to the Department of Energy and to the
3 Department of State Lands for approval before beginning construction and shall ensure that
4 construction would have no impact on any jurisdictional water identified in the report.
5 [Amendment #1]

VI. SUCCESSORS AND ASSIGNS

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

VII. SEVERABILITY AND CONSTRUCTION

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

VIII. GOVERNING LAW AND FORUM

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

IX. EXECUTION AND EFFECTIVE DATE

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

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

ENERGY FACILITY SITING COUNCIL

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

Date: March 12, 2010

NORTH HURLBURT WIND, LLC

By: Derrel A. Grant
Derrel A. Grant, Vice-President
North Hurlburt Wind, LLC

Date: March 12, 2010