

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

---

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

October 2019

**ISSUANCE DATES**

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

## The Oregon Energy Facility Siting Council

### FIRST AMENDED SITE CERTIFICATE FOR SHEPHERDS FLAT CENTRAL

#### I. INTRODUCTION

1 The Oregon Energy Facility Siting Council (Council) issues this site certificate for the  
2 Shepherds Flat Central (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 South Hurlburt Wind, LLC (certificate holder) authorizing the certificate holder to  
5 construct and operate the facility in Gilliam County and Morrow County, Oregon. [Amendment #1  
6 for the Shepherds Flat 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*, (c) the *Final Order on Amendment #1*, (d) and the *Final Order on Amendment #2*. In  
12 interpreting this site certificate, any ambiguity will be clarified by reference to the following, in  
13 order of priority: (1) this Second Amended Site Certificate, (2) the *Final Order on Amendment*  
14 *#2*, (3) the *Final Order on Amendment #1*, (4) the *Final Order on Amendment #1 for the*  
15 *Shepherds Flat Wind Farm*, (5) the *Final Order on the Application for the Shepherds Flat Wind*  
16 *Farm* and (6) the record of the proceedings that led to the Final Orders on the Application,  
17 Amendment #1, and Amendment #2 for the Shepherds Flat Wind Farm and to the *Final Order*  
18 *on Amendment #1 and #2*. [Amendment #1 (SFWF); Amendment #1]

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

20 In interpreting this site certificate, any ambiguity will be clarified by reference to the  
21 following, in order of priority: this Second Amended Site Certificate, Final Order on  
22 Amendment #2, the Final Order on Amendment #1, the Final Order on the Application and the  
23 record of the proceedings that led to the Final Orders on the Application and Amendments #1,  
24 and #2. [Amendments #1, and #2]

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

#### II. SITE CERTIFICATION

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

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

- 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 require  
10 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, the  
12 certificate holder shall comply with applicable state and federal laws adopted in the future to  
13 the extent that such compliance is required under the respective state agency statutes and  
14 rules. ORS 469.401(2).
- 15 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities and  
16 political subdivisions in Oregon as to the approval of the site and the construction, operation  
17 and retirement of the facility as to matters that are addressed in and governed by this site  
18 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 shall,  
21 upon submission of the proper application and payment of the proper fees, but without  
22 hearings or other proceedings, issue such permit, license or other approval subject only to  
23 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 site  
28 and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or  
29 request another state agency or local government to inspect, the site at any time in order to  
30 ensure that the facility is being operated consistently with the terms and conditions of this  
31 site certificate. ORS 469.430.

### III. DESCRIPTION

#### 1. The Facility

##### (a) The Energy Facility

32 The energy facility is an electric power generating facility with an average electric  
33 generating capacity of up to 97 megawatts and a peak generating capacity of not more than 290  
34 megawatts that produces power from wind energy. The facility consists of not more than 116  
35 wind turbines. The energy facility is described further in the *Final Order on Amendment #1 for*  
36 *the Shepherds Flat Wind Farm* and in the *Final Order on Amendment #1*. [Amendment #1 (SFWF);  
37 Amendment #1] Request for Amendment #2 approves O&M demonstration activities for two  
38 specific wind turbines (T368 and T370). The demonstration activities include replacing the wind  
39 turbine blades and modifying the nacelles. [Amendment #2]

**(b) Related or Supporting Facilities**

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

- 4 • Power Collection System
- 5 • Collector Substation
- 6 • Meteorological towers
- 7 • Field workshop
- 8 • Control system
- 9 • Access roads
- 10 • Additional construction areas

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

12 **Power Collection System**

13 A power collection system operating at 34.5 kilovolts (kV) transports power from each  
14 turbine to a collector substation. To the extent practicable, the collection system is installed  
15 underground at a depth of at least three feet. Segments of the collector system are aboveground.  
16 Aboveground segments are installed on single-pole, cross-arm structures. [Amendment #1]

17 **Collector Substations and Interconnection**

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

21 **Meteorological Towers**

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

23 **Field Workshop**

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

26 **Control System**

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

31 **Access Roads**

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

35 **Temporary Construction Areas**

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

## 2. Location of the Facility

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

## IV. CONDITIONS REQUIRED BY COUNCIL RULES

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

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

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

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

30 1 OAR 345-025-0006 (1): The Council shall not change the conditions of the site certificate  
31 except as provided for in OAR Chapter 345, Division 27.

32 2 OAR 345-025-0006 (2): The certificate holder shall submit a legal description of the site to  
33 the Department of Energy within 90 days after beginning operation of the facility. The legal  
34 description required by this rule means a description of metes and bounds or a description  
35 of the site by reference to a map and geographic data that clearly and specifically identifies  
36 the outer boundaries that contain all parts of the facility.

37 3 OAR 345-025-0006(3): The certificate holder shall design, construct, operate and retire the  
38 facility:

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

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

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

5 4 OAR 345-025-0006(4): The certificate holder shall begin and complete construction of the  
6 facility by the dates specified in the site certificate. (*See Conditions 24 and 25.*)

7 5 OAR 345-025-0006(5): Except as necessary for the initial survey or as otherwise allowed  
8 for wind energy facilities, transmission lines or pipelines under this section, the certificate  
9 holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing  
10 on any part of the site until the certificate holder has construction rights on all parts of the  
11 site. For the purpose of this rule, “construction rights” means the legal right to engage in  
12 construction activities. For wind energy facilities, transmission lines or pipelines, if the  
13 certificate holder does not have construction rights on all parts of the site, the certificate  
14 holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a  
15 clearing on a part of the site if the certificate holder has construction rights on that part of  
16 the site and:

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

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

24 6 OAR 345-025-0006(6): If the certificate holder becomes aware of a significant  
25 environmental change or impact attributable to the facility, the certificate holder shall, as  
26 soon as possible, submit a written report to the Department describing the impact on the  
27 facility and any affected site certificate conditions.

28 7 OAR 345-025-0006(7): The certificate holder shall prevent the development of any  
29 conditions on the site that would preclude restoration of the site to a useful, non-hazardous  
30 condition to the extent that prevention of such site conditions is within the control of the  
31 certificate holder.

32 8 OAR 345-025-0006(8): Before beginning construction of the facility, the certificate holder  
33 shall submit to the State of Oregon, through the Council, a bond or letter of credit, in a form  
34 and amount satisfactory to the Council to restore the site to a useful, non-hazardous  
35 condition. The certificate holder shall maintain a bond or letter of credit in effect at all  
36 times until the facility has been retired. The Council may specify different amounts for the  
37 bond or letter of credit during construction and during operation of the facility. (*See*  
38 *Condition 30.*)

39 9 OAR 345-025-0006(9): The certificate holder shall retire the facility if the certificate holder  
40 permanently ceases construction or operation of the facility. The certificate holder shall  
41 retire the facility according to a final retirement plan approved by the Council, as described  
42 in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a  
43 useful, non-hazardous condition at the time of retirement, notwithstanding the Council’s  
44 approval in the site certificate of an estimated amount required to restore the site.

- 1 10 OAR 345-025-0006 (10): The Council shall include as conditions in the site certificate all  
2 representations in the site certificate application and supporting record the Council deems to  
3 be binding commitments made by the applicant.
- 4 11 OAR 345-025-0006(11): Upon completion of construction, the certificate holder shall  
5 restore vegetation to the extent practicable and shall landscape all areas disturbed by  
6 construction in a manner compatible with the surroundings and proposed use. Upon  
7 completion of construction, the certificate holder shall remove all temporary structures not  
8 required for facility operation and dispose of all timber, brush, refuse and flammable or  
9 combustible material resulting from clearing of land and construction of the facility.
- 10 12 OAR 345-025-0006(12): The certificate holder shall design, engineer and construct the  
11 facility to avoid dangers to human safety and the environment presented by seismic hazards  
12 affecting the site that are expected to result from all maximum probable seismic events. As  
13 used in this rule “seismic hazard” includes ground shaking, ground failure, landslide,  
14 liquefaction triggering and consequences (including flow failure, settlement buoyancy, and  
15 lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and  
16 soil-structure interaction. For coastal sites, this also includes tsunami hazards and  
17 seismically-induced coastal subsidence.
- 18 13 OAR 345-025-0006(13): The certificate holder shall notify the Department, the State  
19 Building Codes Division and the Department of Geology and Mineral Industries promptly  
20 if site investigations or trenching reveal that conditions in the foundation rocks differ  
21 significantly from those described in the application for a site certificate. After the  
22 Department receives the notice, the Council may require the certificate holder to consult  
23 with the Department of Geology and Mineral Industries and the Building Codes Division  
24 and to propose mitigation actions.
- 25 14 OAR 345-025-0006(14): The certificate holder shall notify the Department, the State  
26 Building Codes Division and the Department of Geology and Mineral Industries promptly  
27 if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity  
28 of the site. After the Department receives notice, the Council may require the certificate  
29 holder to consult with the Department of Geology and Mineral Industries and the Building  
30 Codes Division to propose and implement corrective or mitigation actions.
- 31 15 OAR 345-025-0006(15): Before any transfer of ownership of the facility or ownership of  
32 the site certificate holder, the certificate holder shall inform the Department of the proposed  
33 new owners. The requirements of OAR 345-027-0100 apply to any transfer of ownership  
34 that requires a transfer of the site certificate.
- 35 16 OAR 345-025-0006(16): If the Council finds that the certificate holder has permanently  
36 ceased construction or operation of the facility without retiring the facility according to a  
37 final retirement plan approved by the Council, as described in OAR 345-027-0110, the  
38 Council shall notify the certificate holder and request that the certificate holder submit a  
39 proposed final retirement plan to the Office within a reasonable time not to exceed 90 days.  
40 If the certificate holder does not submit a proposed final retirement plan by the specified  
41 date, the Council may direct the Department to prepare a proposed final retirement plan for  
42 the Council’s approval. Upon the Council’s approval of the final retirement plan, the  
43 Council may draw on the bond or letter of credit described in OAR 345-027-0020(8) to  
44 restore the site to a useful, non-hazardous condition according to the final retirement plan,

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

7 17 OAR 345-025-0010(4): If the facility includes any transmission line under Council  
8 jurisdiction:

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

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

16 18 OAR 345-025-0010(5): If the proposed energy facility is a pipeline or a transmission line or  
17 has, as a related or supporting facility, a pipeline or transmission line, the Council shall  
18 specify an approved corridor in the site certificate and shall allow the certificate holder to  
19 construct the pipeline or transmission line anywhere within the corridor, subject to the  
20 conditions of the site certificate. If the applicant has analyzed more than one corridor in its  
21 application for a site certificate, the Council may, subject to the Council’s standards,  
22 approve more than one corridor.

23 19 OAR 345-025-0016: In the site certificate, the Council shall include conditions that address  
24 monitoring and mitigation to ensure compliance with the standards contained in OAR  
25 Chapter 345, Division 22 and Division 24. The site certificate applicant, or for an  
26 amendment, the certificate holder, shall develop proposed monitoring and mitigation plans  
27 in consultation with the Department and, as appropriate, other state agencies, local  
28 governments and tribes. Monitoring and mitigation plans are subject to Council approval.  
29 The Council shall incorporate approved monitoring and mitigation plans in applicable site  
30 certificate conditions.

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



1 21 OAR 345-026-0080: The certificate holder shall report according to the following  
2 requirements:

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

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

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

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

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

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

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

31 (A)

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

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

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

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

1 (vii)

2 22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange  
3 copies of all correspondence or summaries of correspondence related to compliance with  
4 statutes, rules and local ordinances on which the Council determined compliance, except for  
5 material withheld from public disclosure under state or federal law or under Council rules.  
6 The certificate holder may submit abstracts of reports in place of full reports; however, the  
7 certificate holder shall provide full copies of abstracted reports and any summarized  
8 correspondence at the request of the Department.

9 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72  
10 hours of any occurrence involving the facility if:

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

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

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

## V. SPECIFIC FACILITY CONDITIONS

16 The conditions listed in this section include conditions based on representations in the  
17 site certificate application and supporting record. These conditions are required under OAR 345-  
18 027-0020(10). The certificate holder must comply with these conditions in addition to the  
19 conditions listed in Section VI. This section includes other specific facility conditions the  
20 Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345,  
21 Divisions 22 and 24, and to protect the public health and safety. For conditions that require  
22 subsequent review and approval of a future action, ORS 469.402 authorizes the Council to  
23 delegate the future review and approval to the Department if, in the Council's discretion, the  
24 delegation is warranted under the circumstances of the case.

### 1. Certificate Administration Conditions

25 24 The certificate holder shall begin construction of the facility by July 25, 2011. The Council  
26 may grant an extension of the deadline to begin construction in accordance with OAR 345-  
27 027-0030 or any successor rule in effect at the time the request for extension is submitted.  
28 [Amendment #1 (SFWF)]

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

38 26 The certificate holder shall construct a facility substantially as described in the site  
39 certificate and may select turbines of any type, subject to the following restrictions and  
40 compliance with all other site certificate conditions. Before beginning construction, the

1 certificate holder shall provide to the Department a description of the turbine types selected  
2 for the facility demonstrating compliance with this condition.

3 (a) The total number of turbines at the facility must not exceed 116 turbines.

4 (b) The combined peak generating capacity of the facility must not exceed 290  
5 megawatts.

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

8 (d) The minimum blade tip clearance must be 25 meters above ground, with the  
9 exception of turbine number 368 and 370 for which the minimum blade tip clearance must  
10 be 21.5 meters above the ground.

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

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

15 (g) The certificate holder shall request an amendment of the site certificate to increase the  
16 combined peak generating capacity of the facility beyond 290 megawatts, to increase the  
17 number of wind turbines to more than 116 wind turbines or to install wind turbines with a  
18 hub height greater than 105 meters, a blade tip height greater than 150 meters or a blade tip  
19 clearance less than 25 meters above ground.

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

21 27 The certificate holder shall obtain all necessary federal, state and local permits or approvals  
22 required for construction, operation and retirement of the facility or ensure that its  
23 contractors obtain the necessary federal, state and local permits or approvals.

24 28 Before beginning construction, the certificate holder shall notify the Department in advance  
25 of any work on the site that does not meet the definition of “construction” in ORS 469.300,  
26 excluding surveying, exploration or other activities to define or characterize the site, and  
27 shall provide to the Department a description of the work and evidence that its value is less  
28 than \$250,000.

29 29 Before beginning construction and after considering all micrositing factors, the certificate  
30 holder shall provide to the Department, to the Oregon Department of Fish and Wildlife  
31 (ODFW) and to the Planning Directors of Morrow County and Gilliam County detailed  
32 maps of the facility site, showing the final locations where the certificate holder proposes to  
33 build facility components, and a table showing the acres of temporary and permanent  
34 habitat impact by habitat category and subtype, similar to Table 9 in the Final Order on  
35 Amendment #1 for the Shepherds Flat Wind Farm. The detailed maps of the facility site  
36 shall indicate the habitat categories of all areas that would be affected during construction  
37 (similar to the maps labeled “ODFW-2” in the site certificate application for the Shepherds  
38 Flat Wind Farm). In classifying the affected habitat into habitat categories, the certificate  
39 holder shall consult with the ODFW. The certificate holder shall not begin ground  
40 disturbance in an affected area until the habitat assessment has been approved by the  
41 Department. The Department may employ a qualified contractor to confirm the habitat  
42 assessment by on-site inspection. [Amendment #1 (SFWF)]

43 30 Before beginning construction, the certificate holder shall submit to the State of Oregon  
44 through the Council a bond or letter of credit in the amount described herein naming the

1 State of Oregon, acting by and through the Council, as beneficiary or payee. The initial  
2 bond or letter of credit amount is either \$9.076 million (1<sup>st</sup> Quarter 2010 dollars), to be  
3 adjusted to the date of issuance as described in (b), or the amount determined as described  
4 in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an  
5 annual basis thereafter as described in (b).

6 (a) The certificate holder may adjust the amount of the bond or letter of credit based on  
7 the final design configuration of the facility and turbine types selected by applying the unit  
8 costs and general costs illustrated in Table 2 in the Final Order on the Amendment #1 for  
9 the Shepherds Flat Wind Farm and calculating the financial assurance amount as described  
10 in that order, adjusted to the date of issuance as described in (b) and subject to approval by  
11 the Department.

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

14 (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in  
15 3<sup>rd</sup> Quarter 2009 dollars) to present value, using the U.S. Gross Domestic Product Implicit  
16 Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative  
17 Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the  
18 "Index") and using the index value for 3<sup>rd</sup> Quarter 2009 dollars and the quarterly index  
19 value for the date of issuance of the new bond or letter of credit. If at any time the Index is  
20 no longer published, the Council shall select a comparable calculation to adjust 3<sup>rd</sup> Quarter  
21 2009 dollars to present value.

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

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

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

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

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

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

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

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

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

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

## **2. Land Use Conditions**

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

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

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

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

10 (e) The turbine tower setback distance described in (d) does not apply to the two isolated  
11 areas excluded from the certificate holder's lease with the landowner identified as "Area A"  
12 and "Area B" in the *Final Order on Amendment #1*.

13 [Amendment #1]

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

20 42 The certificate holder shall install gates on all private facility access roads in Gilliam  
21 County, in accordance with Gilliam County Zoning Ordinance Section 7.020(T)(4)(d)(6).

### 3. Cultural Resource Conditions

22 43 Before beginning construction, the certificate holder shall provide to the Department a map  
23 showing the final design locations of all components of the facility and areas that would be  
24 temporarily disturbed during construction. In addition, the certificate holder shall comply  
25 with the following requirements:

26 (a) The certificate holder shall avoid disturbance within a 30-meter buffer around the  
27 prehistoric archaeological sites and historic-period archaeological sites within the facility  
28 boundary identified by AINW as "possibly eligible" for listing in the National Register of  
29 Historic Places (NRHP) as described in the Final Order on the Application for the  
30 Shepherds Flat Wind Farm.

31 (b) The certificate holder shall avoid disturbance of the stacked rock features within the  
32 facility boundary identified by AINW as "possibly eligible" for listing in the NRHP as  
33 described in the Final Order on the Application for the Shepherds Flat Wind Farm and  
34 shall, to the extent practicable, maintain a 30-meter no-construction buffer around these  
35 features. If a 30-meter buffer cannot be maintained, the certificate holder shall consult with  
36 the State Historic Preservation Office (SHPO) and the Department to determine appropriate  
37 action to preserve or document the feature.

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

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

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

11 [Amendment #1 (SFWF)]

12 44 The certificate holder shall ensure that a qualified archeologist, as defined in OAR 736-051-  
13 0070, instructs construction personnel in the identification of cultural materials and  
14 avoidance of accidental damage to identified resource sites.

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

25 46 In reference to the presumed alignments of the Oregon Trail described in the Final Order on  
26 the Application, the certificate holder shall comply with the following requirements:

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

29 (b) The certificate holder shall not locate facility components on undeveloped land where  
30 the trail alignment was marked by existing Oregon-California Trail Association markers as  
31 described in the October 2007 Archaeological Investigations Northwest, Inc. report (No.  
32 2012) on the Oregon Trail.

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

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

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

- 1 47 Before beginning construction, the certificate holder shall conduct a site-specific  
2 geotechnical investigation and shall report its findings to the Oregon Department of  
3 Geology & Mineral Industries (DOGAMI) and the Department. The certificate holder shall  
4 conduct the geotechnical investigation after consultation with DOGAMI and in general  
5 accordance with DOGAMI open file report 00-04 “Guidelines for Engineering Geologic  
6 Reports and Site-Specific Seismic Hazard Reports.”
- 7 48 The certificate holder shall design and construct the facility in accordance with  
8 requirements set forth by the State of Oregon’s Building Code Division and any other  
9 applicable codes and design procedures. The certificate holder shall design facility  
10 structures to meet or exceed the minimum standards required by the 2003 International  
11 Building Code.
- 12 49 The certificate holder shall design, engineer and construct the facility to avoid dangers to  
13 human safety presented by non-seismic hazards. As used in this condition, “non-seismic  
14 hazards” include settlement, landslides, flooding and erosion.

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

- 15 50 The certificate holder shall handle hazardous materials used on the site in a manner that  
16 protects public health, safety and the environment and shall comply with all applicable  
17 local, state and federal environmental laws and regulations. The certificate holder shall not  
18 store diesel fuel or gasoline on the facility site.
- 19 51 If a spill or release of hazardous material occurs during construction or operation of the  
20 facility, the certificate holder shall notify the Department within 72 hours and shall clean up  
21 the spill or release and dispose of any contaminated soil or other materials according to  
22 applicable regulations. The certificate holder shall make sure that spill kits containing items  
23 such as absorbent pads are located on equipment and at the field workshop. The certificate  
24 holder shall instruct employees about proper handling, storage and cleanup of hazardous  
25 materials. [Amendment #1 (SFWF)]
- 26 52 During construction, the certificate holder shall ensure that construction personnel are  
27 trained in fire prevention and response, that construction vehicles and equipment are  
28 operated on graveled areas to the extent possible and that open flames, such as cutting  
29 torches, are kept away from dry grass areas.
- 30 53 During operation, the certificate holder shall ensure that all on-site employees receive  
31 annual fire prevention and response training, including tower rescue training, by qualified  
32 instructors or members of the local fire districts. The certificate holder shall ensure that all  
33 employees are instructed to keep vehicles on roads and off dry grassland, except when off-  
34 road operation is required for emergency purposes. The certificate holder shall encourage  
35 employees to become volunteer members of local fire departments and shall facilitate  
36 appropriate training.
- 37 54 During construction and operation of the facility, the certificate holder shall ensure that the  
38 field workshop and all service vehicles are equipped with shovels and portable fire  
39 extinguishers of a 4A50BC or equivalent rating. [Amendment #1 (SFWF)]



- 1 55 During construction and operation of the facility, the certificate holder shall develop and  
2 implement fire safety plans in consultation with the local fire protection agencies (the North  
3 Gilliam County Rural Fire Protection District and the Ione Rural Fire Protection District) to  
4 minimize the risk of fire and to respond appropriately to any fires that occur on the facility  
5 site. In developing the fire safety plans, the certificate holder shall take into account the dry  
6 nature of the region and shall address risks on a seasonal basis. The certificate holder shall  
7 meet annually with local fire protection agency personnel to discuss emergency planning  
8 and shall invite local fire protection agency personnel to observe any emergency drill or  
9 tower rescue training conducted at the facility.
- 10 56 Upon the beginning of operation of the facility, the certificate holder shall provide a site  
11 plan to the local fire protection agencies (the North Gilliam County Rural Fire Protection  
12 District and the Ione Rural Fire Protection District). The certificate holder shall indicate on  
13 the site plan the identification number assigned to each turbine and the location of all  
14 facility structures and shall provide an updated site plan if additional turbines or other  
15 structures are later added to the facility. During operation, the certificate holder shall ensure  
16 that appropriate fire protection agency personnel have an up-to-date list of the names and  
17 telephone numbers of facility personnel available to respond on a 24-hour basis in case of  
18 an emergency on the facility site.
- 19 57 Before beginning construction, the certificate holder shall submit a Notice of Proposed  
20 Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon  
21 Department of Aviation identifying the proposed final locations of turbine towers and  
22 meteorological towers. The certificate holder shall promptly notify the Department of the  
23 responses from the FAA and the Oregon Department of Aviation. [Amendment #1 (SFWF)]
- 24 58 The certificate holder shall construct turbines on concrete foundations and shall surround  
25 the base of each tower with a ten-foot pad area of washed crushed rock on all sides. The  
26 certificate holder shall cover turbine pad areas with non-erosive, non-flammable material as  
27 soon as possible following exposure during construction and shall maintain the pad area  
28 covering during operation of the facility.
- 29 59 The certificate holder shall follow manufacturers' recommended handling instructions and  
30 procedures to prevent damage to turbine or turbine tower components that could lead to  
31 failure.
- 32 60 The certificate holder shall install and maintain self-monitoring devices on each turbine,  
33 connected to a fault annunciation panel or supervisory control and data acquisition  
34 (SCADA) system at the field workshop to alert operators to potentially dangerous  
35 conditions. The certificate holder shall maintain automatic equipment protection features in  
36 each turbine that would shut down the turbine and reduce the chance of a mechanical  
37 problem causing a fire. [Amendment #1 (SFWF)]
- 38 61 The certificate holder shall construct turbine towers with no exterior ladders or access to the  
39 turbine blades and shall install locked tower access doors. The certificate holder shall keep  
40 tower access doors locked at all times except when authorized personnel are present.
- 41 62 The certificate holder shall have an operational safety-monitoring program and shall inspect  
42 all turbine and turbine tower components on a regular basis. The certificate holder shall

- 1 maintain or repair turbine and turbine tower components as necessary to protect public  
2 safety.
- 3 63 For turbine types having pad-mounted step-up transformers, the certificate holder shall  
4 install the transformers at the base of each tower in locked cabinets designed to protect the  
5 public from electrical hazards and to avoid creation of artificial habitat for raptor prey.
- 6 64 To protect the public from electrical hazards, the certificate holder shall enclose the facility  
7 substation with appropriate fencing and locked gates. [Amendment #1 (SFWF)]
- 8 65 The certificate holder shall construct access roads with a finished width of approximately  
9 16 feet, a compacted base of native soil and a gravel surface to a depth of four to ten inches.  
10 [Amendment #1 (SFWF); Amendment #1]
- 11 66 During construction, the certificate holder shall implement measures to reduce traffic  
12 impacts, including:
- 13 (a) Providing notice to the City of Arlington Road Department, the Gilliam County Road  
14 Department and the Gilliam County Sheriff’s Office in advance of deliveries that could  
15 cause traffic disruption in Arlington.
- 16 (b) Providing notice to the residents of Arlington in advance of deliveries that could  
17 cause traffic disruption.
- 18 (c) Requiring flaggers to be at appropriate locations at appropriate times during  
19 construction to direct traffic.
- 20 67 The certificate holder shall cooperate with the Gilliam County Road Department and the  
21 Morrow County Public Works Department to ensure that any unusual damage or wear to  
22 county roads that is caused by construction of the facility is repaired by the certificate  
23 holder. Upon completion of construction, the certificate holder shall restore county roads to  
24 pre-construction condition or better, to the satisfaction of the applicable county  
25 departments. If required by Morrow County or Gilliam County, the certificate holder shall  
26 post bonds to ensure funds are available to repair and maintain roads affected by the  
27 proposed facility.
- 28 68 During construction, the certificate holder shall require that all on-site construction  
29 contractors develop and implement a site health and safety plan that informs workers and  
30 others on-site what to do in case of an emergency and that includes the locations of fire  
31 extinguishers and nearby hospitals, important telephone numbers and first aid techniques.  
32 The certificate holder shall ensure that construction contractors have personnel on-site who  
33 are trained and equipped for tower rescue and who are first aid and CPR certified.
- 34 69 During operation, the certificate holder shall develop and implement a site health and safety  
35 plan that informs employees and others on-site what to do in case of an emergency and that  
36 includes the locations of fire extinguishers and nearby hospitals, important telephone  
37 numbers and first aid techniques.
- 38 70 During construction and operation of the facility, the certificate holder shall provide for on-  
39 site security and shall establish good communications between on-site security personnel  
40 and local law enforcement agencies (Gilliam County Sheriff and Morrow County Sheriff).  
41 During operation, the certificate holder shall ensure that appropriate law enforcement  
42 agency personnel have an up-to-date list of the names and telephone numbers of facility

1 personnel available to respond on a 24-hour basis in case of an emergency on the facility  
2 site.

3 71 The certificate holder shall notify the Department and the Planning Directors of Gilliam  
4 County and Morrow County within 72 hours of any accidents including mechanical failures  
5 on the site associated with construction or operation of the facility that may result in public  
6 health and safety concerns.

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

7 72 The certificate holder shall not build any roads or construct transmission line support poles  
8 within Eightmile Creek or within a 10-foot buffer from the ordinary high water line of the  
9 creek.

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

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

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

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

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

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. The  
31 certificate holder shall not use more than 5,000 gallons of water per day from the facility's  
32 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 to the extent  
34 practicable. The certificate holder shall install underground lines at a minimum depth of  
35 three feet. Based on geotechnical conditions or other engineering considerations, the  
36 certificate holder may install segments of the collector system aboveground on single-pole,  
37 cross-arm structures, but the total length of aboveground double-circuit segments must not  
38 exceed 9 miles and the total length of aboveground single-circuit segments must not exceed  
39 6 miles. [Amendment #1 (SFWF); Amendment #1]

1 80 The certificate holder shall ground appropriate sections of fencing that parallel transmission  
2 lines to reduce the risk of shock from induced voltage. In particular, the certificate holder  
3 shall ground appropriate sections of fencing located in the northern project area on the west  
4 side of Eightmile Canyon if the certificate holder builds a parallel transmission line in that  
5 location that could induce a voltage on the fence.

6 81 The certificate holder shall take reasonable steps to reduce or manage human exposure to  
7 electromagnetic fields, including but not limited to:

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

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

12 (c) Constructing all aboveground 230-kV transmission lines with a minimum clearance of  
13 24 feet from the ground.

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

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

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

21 [Amendment #1 (SFWF)]

22 82 In advance of, and during, preparation of detailed design drawings and specifications for  
23 230-kV and 34.5-kV transmission lines, the certificate holder shall consult with the Utility  
24 Safety and Reliability Section of the Oregon Public Utility Commission to ensure that the  
25 designs and specifications are consistent with applicable codes and standards.

## 8. Plants, Wildlife & Habitat Protection Conditions

26 83 The certificate holder shall conduct wildlife monitoring as described in the *Wildlife*  
27 *Monitoring and Mitigation Plan* that is incorporated in the *Final Order on Amendment #2*  
28 as Attachment D and as amended from time to time. [Amendment #1 (SFWF); Amendment #1;  
29 Amendment #2]

30 84 The certificate holder shall restore areas disturbed by facility construction but not occupied  
31 by permanent facility structures, and temporarily disturbed during routine operational road  
32 work activity, according to the methods and monitoring procedures described in the  
33 Revegetation Plan that is incorporated in the Final Order on Amendment #2 for the  
34 Shepherds Flat Wind Farm as Attachment C and as amended from time to time. [Amendment  
35 #1 (SFWF); Amendment #2]

36 85 The certificate holder shall acquire the legal right to create, enhance, maintain and protect a  
37 habitat mitigation area as long as the site certificate is in effect by means of an outright  
38 purchase, conservation easement or similar conveyance and shall provide a copy of the  
39 documentation to the Department. Within the habitat mitigation area, the certificate holder  
40 shall improve the habitat quality as described in the *Habitat Mitigation Plan* that is  
41 incorporated in the *Final Order on Amendment #1* as Attachment C and as amended from  
42 time to time. [Amendment #1 (SFWF); Amendment #1]

1 86 The certificate holder shall avoid permanent and temporary disturbance to the areas  
2 described in (a) through (g) and, during the times indicated, shall avoid construction  
3 disturbance in the areas described in (h) through (k). The certificate holder shall flag these  
4 areas for the duration of construction activities nearby and shall ensure that construction  
5 personnel avoid disturbance of the areas. The avoidance areas are:

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

8 (b) Areas of Category 3 shrub-steppe habitat as described in the *Final Order on*  
9 *Amendment #1 for the Shepherds Flat Wind Farm*, Section IV.4.(b)A, including three small  
10 areas of sage shrub-steppe habitat, one small area of purshia shrub-steppe habitat and one  
11 small area of shrub-steppe rabbitbrush habitat. [Amendment #1 (SFWF)]

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

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

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

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

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

19 (h) The area within 1,000 feet of Category 2 Washington ground squirrel (WGS) habitat  
20 (as shown on “ODFW-2” Figure 8 in the Shepherds Flat Wind Farm Application) during  
21 the period in which the squirrels are active. To determine when the WGS are active, the  
22 certificate holder shall hire a qualified independent professional biologist to monitor the on-  
23 site colony within the Category 1 WGS habitat area described in the Final Order on the  
24 Application. The biologist shall begin monitoring the colony on January 15 if construction  
25 activity is occurring within 0.5 miles of the Category 2 WGS habitat at that time.

26 Otherwise, the biologist shall begin monitoring upon the start of construction activity  
27 within 0.5 miles of the Category 2 WGS habitat at any time between January 15 and June  
28 30. The biologist shall conduct weekly monitoring to detect signs of WGS activity. If signs  
29 of WGS activity are observed, the certificate holder shall halt construction activities within  
30 the avoidance area and shall notify the Department. The certificate holder shall flag the  
31 avoidance area and ensure that construction personnel avoid disturbance of the area until  
32 the biologist has determined that the WGS are no longer active. While the WGS are active,  
33 the biologist may suspend weekly monitoring until May 1. The certificate holder may  
34 resume construction activities within the avoidance area when the WGS are no longer  
35 active, as determined by the absence of WGS activity during three consecutive weeks of  
36 monitoring by the biologist. [This text had been removed by Amendment #1 (SFWF) and was restored  
37 by Amendment #1]

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

44 (j) The area within 1,000 feet of any essential, limited and irreplaceable Washington  
45 ground squirrel (WGS) habitat within the new areas added to the site by Amendment #1  
46 (excluding the areas within the site boundaries of Shepherds Flat North, Shepherds Flat  
47 Central and Shepherds Flat South as approved on September 11, 2009) during the period in

1 which the squirrels are active. The certificate holder shall hire a qualified independent  
2 professional biologist to conduct pre-construction surveys for State-listed threatened,  
3 endangered or sensitive wildlife species in these new areas within 1,000 feet of any area  
4 potentially disturbed by facility construction. To determine whether WGS habitat exists and  
5 to determine whether WGS are active, the biologist shall search for WGS in suitable habitat  
6 using a two-survey protocol approved by the Oregon Department of Fish and Wildlife  
7 (ODFW). The certificate holder shall submit the results of the survey to ODFW and to the  
8 Department. If signs of WGS activity are observed, the certificate holder shall flag the  
9 avoidance area and ensure that construction personnel avoid disturbance of the area until  
10 the biologist has determined that the WGS are no longer active.

11 (k) Areas within a suitable buffer around confirmed populations of Laurent's milk-vetch  
12 or any other State-listed threatened or endangered plant species within the new areas added  
13 to the site by Amendment #1 (excluding the area within the site boundaries of Shepherds  
14 Flat North, Shepherds Flat Central and Shepherds Flat South as approved on September 11,  
15 2009). The certificate holder shall not install facility components or cause temporary  
16 disturbance within these areas. The certificate holder shall hire a qualified independent  
17 professional biologist to conduct pre-construction surveys for State-listed threatened or  
18 endangered plant species in these new areas within 1,000 feet of any area potentially  
19 disturbed by facility construction. The certificate holder shall submit the results of the  
20 survey to the Department.

21 [Amendment #1]

22 87 The certificate holder shall microsite the facility in conformance with the industry's best  
23 practices. The certificate holder shall follow the recommendations of a qualified wildlife  
24 biologist to avoid building turbine towers in the following locations:

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

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

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

29 (d) [text removed by Amendment #1 (SFWF)]

30 88 During construction, the certificate holder shall avoid construction activities in areas around  
31 active nests of the following species during the sensitive period, as provided in this  
32 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

33 The certificate holder shall conduct pre-construction surveys, using a protocol approved by  
34 the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any  
35 active nests of these species within 0.5 miles of any areas that would be disturbed during  
36 construction. The certificate holder shall search the scheduled construction areas and all  
37 areas within 0.5 miles of the construction areas. If a nest is occupied by any of these species  
38 after the beginning of the sensitive period, the certificate holder will flag the boundaries of  
39 a 0.5-mile buffer area around the nest and shall instruct construction personnel to avoid  
40 disturbance of the area. The certificate holder shall hire a qualified independent  
41 professional biologist to observe the active nest sites during the sensitive period for signs of

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

12 89 The certificate holder shall not remove any trees that are greater than three feet in height.

13 90 The certificate holder shall design all aboveground transmission line support structures  
14 following the most current suggested practices for avian protection on power lines  
15 published by the Avian Power Line Interaction Committee.

16 91 The certificate holder shall reduce the risk of injuries to avian species by:

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

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

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

24 92 The certificate holder shall impose and enforce construction and operation speed limits of 5  
25 miles per hour on roads within 1,000 feet of Category 1 or Category 2 Washington ground  
26 squirrel habitat and 20 miles per hour on all other facility roads and shall ensure that all  
27 construction and operations personnel are instructed on the importance of cautious driving  
28 practices while on facility roads. [Amendment #1 (SFWF); Amendment #1]

## 9. Visual Effects Conditions

29 93 To reduce the visual impact of the facility, the certificate holder shall:

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

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

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

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

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

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

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

42 [Amendment #1 (SFWF)]

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

5 95 The certificate holder shall not use exterior nighttime lighting except:

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

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

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

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

18 [Amendment #1 (SFWF)]

## 10. Noise Control Conditions

19 96 To reduce noise impacts at nearby residences, the certificate holder shall:

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

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

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

25 97 Before beginning construction, the certificate holder shall provide to the Department:

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

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

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

37 (d) For each noise-sensitive property where the certificate holder relies on a noise waiver  
38 to demonstrate compliance in accordance with OAR 340-035-0035 (1)(b)(B)(iii)(III), a  
39 copy of the a legally effective easement or real covenant pursuant to which the owner of the  
40 property authorizes the certificate holder's operation of the facility to increase ambient  
41 statistical noise levels L<sub>10</sub> and L<sub>50</sub> by more than 10 dBA at the appropriate measurement  
42 point. The legally-effective easement or real covenant must: include a legal description of  
43 the burdened property (the noise sensitive property); be recorded in the real property



1 records of the county; expressly benefit the certificate holder; expressly run with the land  
2 and bind all future owners, lessees or holders of any interest in the burdened property; and  
3 not be subject to revocation without the certificate holder's written approval.

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

## **11. Waste Management Conditions**

12 99 The certificate holder shall provide portable toilets for on-site sewage handling during  
13 construction and shall ensure that they are pumped and cleaned regularly by a licensed  
14 contractor who is qualified to pump and clean portable toilet facilities.

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

19 101 The certificate holder shall implement a waste management plan during construction that  
20 includes but is not limited to the following measures:

21 (a) Recycling steel and other metal scrap.

22 (b) Recycling wood waste.

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

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

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

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

32 102 The certificate holder shall implement a waste management plan during operation that  
33 includes but is not limited to the following measures:

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

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

36 (c) Recycling used oil and hydraulic fluid.

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

39 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and oil-  
40 absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries  
41 for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous  
42 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 of  
5 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 that  
9 construction would have no impact on any jurisdictional water identified in the report.  
10 [Amendment #1]

## 12. New Conditions applicable to RFA2 facility modifications

11 The conditions listed in this section are specific to the facility modifications approved in the  
12 Second Amended Site Certificate.  
13

14 104 After January 1 but no later than April 30 of the year after completion of the Operations and  
15 Maintenance demonstration activity for wind turbines 368 and 370, as approved in RFA2,  
16 the certificate holder shall include in its Annual Report an activity and operational status  
17 summary of the repowered wind turbines.  
18 [Amendment #2]

19 105 Following completion of the O&M demonstration activity at wind turbines 368 and 370, as  
20 approved in RFA2, the certificate holder shall implement an ongoing inspection,  
21 monitoring and remediation program as follows:

- 22 (a) Submit to the Department a copy of an appropriate foundation inspection plan that  
23 specifies timing, frequency and methodology for evaluation of wind turbine  
24 foundation integrity, fatigue stress and other design checks, as recommended by the  
25 wind turbine manufacturer.
- 26 (b) Within five months of completion of the O&M demonstration activity at wind  
27 turbine 368, the certificate holder must complete a crack depth investigation or other  
28 testing such as coring to verify if the foundation cracks are surface or deep cracks.  
29 The certificate holder shall submit to the Department and DOGAMI the results of  
30 the crack depth investigation, remediation recommendations, and remediation  
31 schedule.
- 32 (c) Wind turbine 368 shall not be operated more than five months after the O&M  
33 demonstration activity unless the remediation actions are implemented per the  
34 investigation report referenced in (b), unless, based on the findings of the  
35 investigation report referenced in (b), approval to continue to operate wind turbine  
36 368 without remediation actions is granted from the Department in consultation  
37 with DOGAMI.

38 [Amendment #2]

39 106 Before beginning the operation and maintenance demonstration activities at Turbines 368  
40 and 370, the certificate holder shall submit a Notice of Proposed Construction or Alteration  
41 to the Federal Aviation Administration (FAA) and the Oregon Department of Aviation  
42 identifying the new maximum blade tip height of 150 meters. The certificate holder shall

1 promptly notify the Department of the responses from the FAA and the Oregon Department  
2 of Aviation.

3 [Amendment #2]

4 107 Prior to completion of the O&M demonstration activity for wind turbines 368 and 370, as  
5 approved in RFA2, the certificate holder shall submit to the Department the maximum  
6 sound power level and octave band for the modified wind turbines based on manufacturer'  
7 warranties or confirmed by other means acceptable to the Department.

8 [Amendment #2]

9

10

**VI. SUCCESSORS AND ASSIGNS**

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

**VII. SEVERABILITY AND CONSTRUCTION**

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

**VIII. GOVERNING LAW AND FORUM**

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


**IX. EXECUTION AND EFFECTIVE DATE**

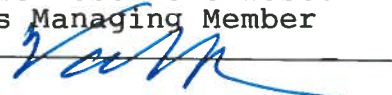
9 This site certificate may be executed in counterparts and will become effective upon  
10 signature by the Chair of the Energy Facility Siting Council and the authorized representative of  
11 the certificate holder. [Amendment #1 (SFWF); Amendment #1; Amendment #2]

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

ENERGY FACILITY SITING COUNCIL

SOUTH HURLBURT WIND, LLC

By:   
Barry Beyeler, Chair  
Oregon Energy Facility Siting Council

By: Caithness Shepherds Flat, LLC  
its Manager  
By: Caithness NorthWestern Wind, LLC  
its Managing Member  
By:   
Print: Vandana Gupta, Vice President

Date: 10/25/2019

Date: 10/25/19