

BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of the Request for Amendment #2 of
the Site Certificate for the Leaning Juniper II Wind
Power Facility

)
)
)
)
FINAL ORDER ON AMENDMENT
#2 AND REQUEST FOR TRANSFER
OF SITE CERTIFICATE

June 21, 2013

TABLE OF CONTENTS

I. INTRODUCTION	1
I.A. NAME AND ADDRESS OF CERTIFICATE HOLDER.....	1
I.B. DESCRIPTION OF THE FACILITY.....	1
II. THE AMENDMENT PROCESS.....	2
II.A. DESCRIPTION OF THE PROPOSED AMENDMENT	2
II.A.1. <i>Summary of Proposed Changes to Site Certificate</i>	2
II.A.2. <i>Summary of Facilities Authorized by Amendment 2</i>	2
II.A.3. <i>Certificate Holder's Proposed Changes to Site Certificate</i>	5
II.A.4. <i>ODOE's Recommended Changes to the Site Certificate</i>	5
II.B. PROCEDURAL HISTORY	5
II.C. REVIEWING AGENCY COMMENTS ON THE REQUEST FOR AMENDMENT #2.....	7
II.D. PUBLIC COMMENTS ON THE REQUEST FOR AMENDMENT #2	7
II.E. REVIEWING AGENCY COMMENTS ON PROPOSED ORDER.....	8
II.F. PUBLIC COMMENTS ON PROPOSED ORDER	8
II.G. APPLICABLE STANDARDS.....	8
II.G.1. <i>When an Amendment is Required</i>	9
II.G.2. <i>Transfer of a Site Certificate</i>	9
III. REVIEW OF THE PROPOSED AMENDMENT AND TRANSFER REQUEST.....	10
III.A. Review of the Proposed Amendment	10
III.A.1. <i>Energy Facility Siting Standards</i>	10
III.A.2. <i>General Standards of Review</i>	11
III.A.3. <i>Organizational Expertise</i>	12
III.A.4. <i>Structural Standard</i>	13
III.A.5. <i>Soil Protection</i>	14
III.A.6. <i>Land Use</i>	16
III.A.7. <i>Protected Areas</i>	19
III.A.8. <i>Retirement and Financial Assurance</i>	22
III.A.9. <i>Fish and Wildlife Habitat</i>	26
III.A.10. <i>Threatened and Endangered Species</i>	29
III.A.11. <i>Scenic Resources</i>	31
III.A.12. <i>Historic, Cultural, and Archaeological Resources</i>	32
III.A.13. <i>Recreation</i>	33
III.A.14. <i>Public Services</i>	34
III.A.15. <i>Waste Minimization</i>	35
III.A.16. <i>Division 23 Standards</i>	36
III.A.17. <i>Division 24</i>	37
III.B. OTHER APPLICABLE REGULATORY REQUIREMENTS UNDER COUNCIL JURISDICTION	40
III.C. REVIEW OF THE TRANSFER REQUEST	47
III.C.1. <i>Organizational Expertise</i>	48
III.C.2. <i>Retirement and Financial Assurance</i>	50
III.D. REQUIREMENTS THAT ARE NOT UNDER COUNCIL JURISDICTION	52
III.D.1. <i>Federally-delegated programs</i>	52

III.D.2. <i>Requirements that do not relate to Siting</i>	52
IV. GENERAL APPLICATION OF CONDITIONS	53
V. GENERAL CONCLUSION AND PROPOSED ORDER	53

LIST OF TABLES

Table 1: Site Restoration Costs	22
---------------------------------------	----

Attachments:

- Attachment A: Redline LJIA Site Certificate
- Attachment B: Redline LJIB Site Certificate
- Attachment C: Redline LJIB-Form Site Certificate
- Attachment D: Amended Wildlife Monitoring and Mitigation Plans
- Attachment E: Amended Habitat Plans
- Attachment F: Amended Revegetation Plans
- Attachment G: Comments on Proposed Order

1 **I. INTRODUCTION**

2
3 The Oregon Energy Facility Siting Council issues this proposed order in accordance with ORS
4 469.405 and OAR 345-027-0070. This proposed order addresses a request by the certificate
5 holder, Leaning Juniper Wind Power II, LLC (LJWP or certificate holder), for amendment of
6 the Site Certificate for the Leaning Juniper II Wind Power Facility (site certificate), and a
7 request by the transferee, Portland General Electric (PGE) for a transfer of one of the
8 resulting amended site certificates from LJWP to PGE, upon closing, should closing occur, as
9 described in more detail below in Section III.C.

10
11 The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this order.

12
13 **I.A. Name and Address of Certificate Holder**

14
15 Leaning Juniper Wind Power Facility II, LLC
16 1125 NW Couch Street, Suite 700
17 Portland, OR 97209

18
19 Individual Responsible for Submitting this Amendment Request:

20
21 Sara McMahon Parsons
22 Iberdrola Renewables, LLC
23 1125 NW Couch Street, Suite 700
24 Portland, OR 97209

25
26 Individual Responsible for Submitting this Transfer Request:

27
28 Lenna Cope
29 Portland General Electric Company
30 121 SW Salmon Street
31 3 WTC BR05
32 Portland, OR 97204

33
34 **I.B. Description of the Facility**

35
36 The Oregon Energy Facility Siting Council (Council) issued the Site Certificate in September
37 2007 and the First Amended Site Certificate in 2009, authorizing the construction and
38 operation of the facility with up a peak generating capacity of approximately 201 megawatts
39 (MW) (LWF or facility). The facility is operational and connects to the regional transmission
40 system through Bonneville Power Administration's Jones Canyon Substation and exiting 230-
41 kilovolt McNary-Santiam transmission line via an overhead 230-kilovolt line. LJF is comprised
42 of LJIA (90.3 MW) and LJIB (111 MW). LJIA and LJIB have different turbine types, separate
43 roads, collector lines and O&M buildings. LJIA is located west of Highway 19 and north of
44 Cedar Springs Road. LJIB is located entirely south of Cedar Springs Road, except for the 230-

1 kV gen-tie transmission line and connection to BPA's Jones Canyon substation. Commercial
2 operation of LJF was declared on June 09, 2011.

3
4 **II. THE AMENDMENT PROCESS**

5
6 **II.A. Description of the Proposed Amendments**

7
8 **II.A.1. Summary of Proposed Changes to Site Certificate**

9
10 LJWP requests an amendment to the site certificate authorizing the division of LJF into two
11 separate facilities (LJIA and LJIB), with each possessing an individual site certificate.
12 Additionally, the transferee, Portland General Electric (PGE), requests a transfer of the LJIB
13 site certificate from LJWP to PGE, effective at closing of the sale of LJIB to PGE.

14
15 This request does not seek to change the site boundary or physical components of the
16 facility. If the LJIB site certificate is transferred, LJWP and PGE will share the 230-kV
17 transmission line to BPA's Jones Canyon substation and an access road. PGE will have a
18 separate road around the LJIA collector substation, a separate control building and a LJIB
19 circuit breaker adjacent to the LJIA collector substation. This allows LJIB equipment to be
20 accessed and maintained independent from the LJIA equipment.¹

21
22 Should closing not occur due to unforeseen circumstances and a transfer of the LJIB site
23 certificate is no longer necessary, LJWP nonetheless requests approval of the division of the
24 facility. In that instance, LJWP would hold the site certificates for both LJIA and LJIB.

25
26 **II.A.2. Summary of Facilities Authorized by Amendment #2**

27
28 If the Council approves Amendment #2, two new site certificates would be issued, one for
29 LJIA and one for LJIB. LJWP would be authorized to own and operate both the LJIA facility
30 and the LJIB facility, although should closing occur on the sale of LJIB to PGE, PGE would be
31 authorized to own and operate the LJIB facility. In that circumstance, each certificate holder
32 may allow shared use of related or supporting facilities by the other certificate holders,
33 subject to compliance with site certificate conditions.

34
35 **(a) Leaning Juniper IIA (LJIA)**

36
37 The energy facility is an operating electric power generating plant with an average electric
38 generating capacity of approximately 30 megawatts and a peak generating capacity of not

¹ These additional changes and minor modifications were contemplated and approved through Change Order 2, submitted July 2012. The details of the Change Order are explained in Section II-Procedural History of this Proposed Order.

1 more than 90.3 megawatts. The facility consists of, at maximum, 43 wind turbines with a
2 peak generating capacity of each turbine no more than 2.1 megawatts.

3

4 **Related or Supporting Facilities**

5

6 **Power Collection System**

7 A power collection system operating at 34.5 kilovolts transports power from each turbine to
8 a collector substation. To the extent practicable, the collection system is installed
9 underground at a depth of at least three feet. Not more than 30 percent of the collector
10 system is installed aboveground.

11

12 **Substations and Interconnection System**

13 The facility includes a substation located near the Bonneville Power Administration Jones
14 Canyon Switching Station. An aboveground transmission line carries the power from the
15 substation to a BPA switching station and an interconnection with the regional transmission
16 grid through BPA's McNary-Santiam 230-kV transmission line.

17

18 **Meteorological Towers**

19 The facility includes two permanent meteorological towers. The met towers are non-guyed
20 steel towers approximately 80 meters in height.

21

22 **Operations and Maintenance Facilities**

23 The facility includes one operations and maintenance building with approximately two acres
24 of fenced, graveled parking and storage area.

25

26 **Control System**

27 A fiber optic communications network links the wind turbines to a central computer at the
28 Operations and Maintenance buildings. A "supervisory, control and data acquisition" system
29 collects operation and performance data from each wind turbine and from the project as a
30 whole and allows remote operation of the wind turbines.

31

32 **Access Roads**

33 The facility includes access roads to provide access to the turbine strings.

34

35 **Site and Site Boundary**

36 The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in
37 Townships 2 and 3 North and Ranges 20 and 21 East. The facility is located on land subject to
38 lease agreements with landowners. There are approximately 6,404 acres within the LJIA site
39 boundary.

40

41

42

43

1 **(b) Leaning Juniper IIB (LJIIB)**

2
3 The energy facility is an operating electric power generating plant with an average electric
4 generating capacity of approximately 37 megawatts and a peak generating capacity of not
5 more than 111 megawatts. The facility consists of, at maximum, 74 wind turbines with the
6 peak generating capacity of each turbine not more than 1.5 megawatts.

7
8 **Related or Supporting Facilities**

9
10 **Power Collection System**

11 A power collection system operating at 34.5 kilovolts transports power from each turbine to
12 a collector substation. To the extent practicable, the collection system is installed
13 underground at a depth of at least three feet. Not more than 30 percent of the collector
14 system is installed aboveground.

15
16 **Substations and Interconnection System**

17 The facility includes a centrally located collector substation near the turbines. An above
18 ground 230-kV transmission line carries the power from the substation to the Bonneville
19 Power Administration Jones Canyon Switching Station and an interconnection with the
20 regional transmission grid through BPA's McNary-Santiam 230-kV transmission line.

21
22 **Meteorological Towers**

23 The facility includes two permanent meteorological towers. The met towers are non-guyed
24 steel towers approximately 80 meters in height.

25
26 **Operations and Maintenance Facilities**

27 The facility includes one operations and maintenance building with approximately 1.5 acres
28 of fenced, graveled parking and storage area adjacent to the building.

29
30 **Control System**

31 A fiber optic communications network links the wind turbines to a central computer at the
32 Operations and Maintenance buildings. A "supervisory, control and data acquisition" system
33 collects operating and performance data from each wind turbine and from the facility as a
34 whole and allows remote operation of the wind turbines.

35
36 **Access Roads**

37 The facility includes access roads to provide access to the turbine strings.

38
39 **Site and Site Boundary**

40 The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in
41 Townships 1 and 2 North and Ranges 21 and 22 East. The facility is located on land subject to
42 lease agreements with landowners, and there are approximately 7,962 acres in the LJIIB site
43 boundary.

1 II.A.3. Certificate Holder's Proposed Changes to Site Certificate

2 Certificate holder submitted a red-line version of the site certificate(s) detailing the
3 proposed changes in its Request for Amendment dated December 28, 2012.

4
5 II.A.4. Council's Recommended Changes to the Site Certificate

6
7 The Council adopts the certificate holder's proposed amendments, subject to slight
8 modification regarding conditions relating to the *Habitat Plans, Wildlife Monitoring and*
9 *Mitigation Plans, the Revegetation Plans* and the transfer of the LJIB site certificate to PGE.
10 Please see Attachment A and B for a red-line version of the recommended site certificate(s)
11 detailing the proposed changes. New text proposed by Council is shown in a single
12 underline. New text proposed by the certificate holder with concurrence by Council is shown
13 with a double underline. Deletions are shown with a strikethrough.

14
15 II.B. Procedural History

16
17 As described above, on September 21, 2007, the Council issued the Site Certificate for
18 Leaning Juniper II Wind Power Facility to Leaning Juniper Wind Power Facility II, LLC. This
19 amendment represents the second amendment to the site certificate.

20
21 On March 17, 2009, the Department concluded that a site certificate amendment
22 proceeding was not necessary to accommodate the changes proposed in Change Order 1 by
23 the certificate holder.² Change Order 1 allowed the location of the substation to be moved
24 approximately 200 feet to the northeast from where it was shown in Figure C-4 of the Site
25 Certificate Application; increased the length of the interconnection line between the
26 substation and the Jones Canyon Switching Station from 400 feet to approximately 1550 feet
27 because of the change in substation location; and realigned a segment of the collector line
28 to accommodate the needs of the parties granting the easement.

29
30 On November 20, 2009, the Council executed Amendment 1 to the site certificate.
31 Amendment 1 expanded the site boundary, adding approximately 7,962 acres to the site,
32 and authorized the construction and operation of up to 84 wind turbines and related
33 infrastructure within the new area (LJIB).

34
35 On July 30, 2012, the Department determined that a site certificate amendment proceeding
36 was unnecessary to accommodate the changes proposed in Change Order 2 by the
37 certificate holder.³ Change Order 2 provided alterations allowing for physical separation
38 between the LJIA and LJIB equipment. The order modified components within the existing
39 fenced and graveled area at the substation and added components outside the existing

² Letter from John G. White, ODOE Siting Analyst to Dave Filippi re: Leaning Juniper II Wind Power Facility, Change Request #1 (March 17, 2009).

³ Letter from John G. White, ODOE Siting Analyst to Sara Parsons re: Leaning Juniper II Wind Power Facility, Change Request #2 (July 30, 2012).

1 fence line. Components outside the existing fence line included: up to three additional 230-
2 kV line support poles; approximately 700 feet of access road running from Rattlesnake Road
3 to the substation; and an addition to the existing fence to accommodate the new access
4 road and gate. These changes provide separate access to the substation equipment that
5 serve LJIB. In the Change Order Request Letter, ODOE confirmed that the changes would
6 not affect the calculation of the habitat mitigation area required under Condition 89 and
7 noted that the construction of the components described in the change request should be
8 performed in compliance with conditions in the site certificate (note especially 11, 17, 28,
9 33, 39, 40, 41, 44, 47, 50, 54, 63, 70, 72, 74, 79, 80, 83-86 and 92). In addition, ODOE
10 explained that it treated the new transmission line and access road components as
11 components of LJIB, even though the existing substation is accounted for in the site
12 restoration cost calculation for LJIA. ODOE explained that in the event that LJIA and LJIB
13 become separate facilities, it would consider the substation to be shared. Therefore, the
14 costs associated with removing the substation and restoring the site within the substation
15 fence would be included in the restoration cost calculation for both facilities.

16
17 On December 28, 2012, LJWP and PGE jointly submitted the "Request for Amendment No. 2
18 to the Site Certificate for the Leaning Juniper II Wind Power Facility." On January 09, 2013,
19 LJWP and PGE sent copies of the amendment request to a list of reviewing agencies
20 provided by the Department with an attached memorandum from the Department
21 requesting agency comments by February 11, 2013. On January 11, 2013 the Department
22 sent notice of the amendment request to all persons on the Council's mailing list, to the
23 special list established for the facility and to an updated list of property owners supplied by
24 LJWP, again requesting comment by February 11, 2013. Public and Agency comments on the
25 Request for Amendment are summarized in the following sections, and, as applicable to
26 Council standards, are addressed in Section III of this Proposed Order.

27
28 By email dated January 11, 2013, the Department notified LJWP and PGE that the Proposed
29 Order would be issued no later than April 12, 2013.

30
31 ODOE issued the proposed order on April 10, 2013 recommending approval of the
32 amendment 2 and the transfer. On the same day, ODOE issued notice of the proposed order
33 in accordance with OAR 345-027-0070, specifying May 10, 2013 as the deadline for public
34 comments and requests for a contested case on the proposed order. ODOE also posted
35 notice on the agency website, along with the proposed order.

36
37 EFSC held an informational hearing on the transfer request at the May 03, 2013 public
38 meeting in Hermiston, Oregon, and considered the proposed order at a public meeting in
39 Portland, Oregon on June 21, 2013.

40
41
42
43

1 **II.C. Reviewing Agency Comments on the Request for Amendment 2**

2
3 **Oregon Department of State Lands**

4 DSL stated that if there is wetland mitigation associated with the facility, before the transfer
5 the applicant must contact the DSL Northern Region Manager to discuss any needed
6 information for transferring the mitigation responsibility. DSL stressed that if there is a
7 mitigation responsibility and/or a financial security for mitigation, those must be transferred
8 along with the site certificate. The Department's assessment of mitigation impacts and
9 responsibilities is discussed below in Section III.

10
11 **Oregon Department of Transportation**

12 ODOT reviewed the proposed amendment and had no comment on the project.

13
14 **Oregon Department of Fish and Wildlife**

15 ODFW reviewed the amendment request and had no concerns about the amendment
16 provided PGE accepts and completes all obligations agreed upon by LJWP in the original site
17 certificate including the Habitat Mitigation, Revegetation and Wildlife Monitoring Plans. The
18 Department's assessment of the wildlife impacts and responsibilities is discussed below in
19 Section III.A.8. Additionally, PGE's responsibilities as transferee are discussed in Section III.D.,
20 which includes a discussion of the necessary commitment from PGE to assume the on-going
21 obligations as stated in the site certificate conditions.

22
23 **Oregon Water Resources Department**

24 OWRD noted that because this is an operating facility with no construction anticipated,
25 OWRD had no concerns because no additional water use or impact is anticipated.

26
27 **Oregon State Historic Preservation Office**

28 SHPO reviewed the amendment request and had no comment addressing cultural resources
29 regarding the transfer of site certificate to PGE. However, SHPO noted that if once the
30 division and transfer are complete and changes to the facilities result in ground disturbing
31 activities, additional survey may be needed.

32
33 **II.D. Public Comments on the Request for Amendment 2**

34
35 **Irene Gilbert**

36 Ms. Gilbert submitted comments on the request for amendment and within her comments
37 included a Request for a Contested Case.⁴ Ms. Gilbert's comments can be summarized as
38 follows: (1) a division of the facility requires a review of the impacts on wildlife that are
39 specific to each facility; (2) mitigation requirements that were based upon assumptions and

⁴ Under OAR 345-027-0070(6), the contested case request was premature. A request for a contested case must be based upon the Proposed Order. Ms. Gilbert was notified and made aware that if she determines a need to request a contested case, she must submit that request after the issuance of the Proposed Order.

1 generalizations that covered both sites as one facility are no longer appropriate or accurate;
2 (3) all binding requirements must be specifically outlined in a site certificate and the
3 proposed order does not meet this requirement; (4) there has been a significant change in
4 the financial viability of Iberdrola since the initial site certificate was issued-a bond needs to
5 be required which is equal to the amount of public financing which has been extended to
6 Iberdrola with the requirement that it be repaid. In response to Ms. Gilbert's comments,
7 Montague and PGE submitted a joint response, addressing each of Ms. Gilbert's comments.⁵
8 The Department reviewed Ms. Gilbert's comments and the joint response, and, as applicable
9 to EFSC standards, addresses each comment in Section III below. The Department addresses
10 wildlife impacts and mitigation in Section III.A.9 and III.A.10, and financial assurance
11 obligations in Section III.A.8. and Section III.C.2.

12 13 II.E. Reviewing Agency Comments on the Proposed Order

14 The Department did not receive any substantive comments from any reviewing agency on
15 the Proposed Order.

16 17 II.F. Public Comments on the Proposed Order

18 19 Marion Weatherford

20 Ms. Weatherford expressed support for the Leaning Juniper facility and cited many of the
21 positive benefits wind energy development has had on Gilliam County. Ms. Weatherford
22 urged EFSC to grant the amendment and transfer.

23 24 Honorable Steve Shaffer

25 Judge Shaffer submitted a comment expressing support for the amendment and transfer,
26 citing the positive economic impacts energy projects can have, and urged EFSC to grant both
27 requests.

28 29 Jan Foglesong

30 Ms. Foglesong expressed support for both the amendment and the transfer and referenced
31 a recent OpEd article outlining the benefits of wind energy in Gilliam County.

32 33 II.G. Applicable Standards

34 Under ORS 469.405, "a site certificate may be amended with the approval of the Energy
35 Facility Siting Council." The Council has adopted rules for determining when a site certificate
36 amendment is required (OAR 345-027-0030 and -0050) and rules setting out the procedure
37 for amending or transferring a site certificate (OAR 345-027-0060 -0070 and -0100).
38 Consistent with OAR 345-027-0100(12), the Council may act concurrently on a request to
39 transfer a site certificate and any other amendment request. However, the Council must
40 follow the procedures described in OAR 345-027-0100 for the transfer request and the
41 procedures described in OAR 345-027-0060 and -0070 for the amendment.

⁵ Joint Response to Comments on Request for Amendment and Transfer, dated March 3, 2013.

1 II.G.1. When an Amendment is Required

2
3 Under OAR 345-027-0050, an amendment is necessary when the certificate holder proposes
4 to design, construct, or operate a facility in a manner different from the description in the
5 site certificate when the proposed change could (a) result in a significant adverse impact
6 that the Council has not addressed in an earlier order and the impact affects a resource
7 protected by Council standards; (b) impair the certificate holder's ability to comply with a
8 site certificate condition; or (c) could require a new condition or a change to a condition in
9 the site certificate. LJWP requests, in addition to the transfer, a division of the facility into
10 two separate, individual facilities (LJIIA and LJIIB) with each possessing its own site
11 certificate.

12
13 In making its decision on the amendment request, OAR 345-027-0070(10)I establishes the
14 scope of Council review. OAR 345-027-0070(10)I guides the Council's consideration because
15 the amendment request does not seek to extend the construction deadlines (OAR 345-027-
16 0070(10)(b)) nor does the request seek to change the site boundary (OAR 345-027-
17 0070(10)(a)). Accordingly, the Council shall consider, under OAR 345-027-0070(10)(c),
18 whether the division of the facility would affect any finding made by the Council in an earlier
19 order. Council standards and previous Council findings are discussed further in Section III
20 below.

21
22 In addition, the Council must consider whether the amount of the bond or letter of credit
23 required under OAR 345-022-0050 is adequate (OAR 345-027-0070(10)(d)). Compliance with
24 this Council standard is discussed in Section III.

25
26 II.G.2. Transfer of a Site Certificate

27
28 OAR 345-027-0100 describes the procedures and process for transferring a site certificate.
29 Under OAR 345-027-0100(1)(a) a transfer of ownership requires a transfer of the site
30 certificate when the person who will have the legal right to possession and control of the
31 site or the facility does not have authority under the site certificate to construct, operate or
32 retire the facility. As described in PGE's 2009 Integrated Resource Plan, PGE is seeking to
33 acquire approximately 101 Mwa, of mid-to-long-term renewable energy supply, bundled
34 with their associated renewable energy credits, to be available beginning in the 2013-2017
35 timeframe. PGE and Montague entered into an Asset Purchase Agreement for (1) the
36 ownership and development rights and Site Certificate for the Montague Wind Power facility
37 and (2) PGE and Leaning Juniper Wind Power II, LLC entered into an APA for the ownership
38 rights and site certificate for the 111 MW Leaning Juniper IIB project. Iberdrola Renewables,
39 LLC is the parent company of the certificate holder. In accordance with PGE's Request for
40 Proposal dated October 1, 2012, PGE and Iberdrola Renewables, LLC jointly prepared and
41 submitted a "Benchmark Bid" consisting of LJIIB and the Montague Wind Power facility.
42 Pursuant to the APAs, if PGE and Iberdrola's Benchmark Bid is selected, PGE will acquire the
43 rights, title and interests in both LJIIB and Montague Wind Power facility upon closing.

1 Therefore, pursuant to OAR 345-027-0100(1)(a), a transfer of the resulting LJIB site
2 certificate is required as PGE, assuming the closing occurs, will have the legal right to
3 possession of LJIB. LJWP will retain authority to construct, operate or retire LJIA.

4
5 To request a transfer, a transferee must submit a written request to the Department that
6 includes the information described in OAR 345-021-0010(1)(a), (d), (f) and (m), a certification
7 that the transferee agrees to abide by all terms and conditions of the site certificate
8 currently in effect and, if known, the date of the transfer of ownership. Additionally, the
9 Council must hold a public informational hearing during a Council meeting before acting on
10 the transfer request. To approve the transfer, the Council must find that the transferee
11 complies with the standards described in OAR 345-022-0010, OAR 345-022-0050 and, if
12 applicable, OAR 345-024-0710(1),⁶ and that the transferee is or will be lawfully entitled to
13 possession or control of the site or the facility described in the site certificate.⁷ As described
14 in more detail below, PGE, as the transferee, joined LJWP in filing the amendment request,
15 and provided the necessary information to demonstrate PGE's compliance with the
16 applicable Council standards.

17 18 **III. REVIEW OF THE PROPOSED AMENDMENT AND TRANSFER**

19 20 **III.A. Review of the Proposed Amendments**

21 A site certificate amendment is necessary under OAR 345-027-0050, because LJWP proposes
22 to operate the facility in a manner different from the description in the site certificate, and
23 the division of the facility could require new conditions or modification to current conditions
24 in the site certificate. In making its decision on this amendment request, OAR 345-027-
25 0070(10)I establishes the Council's scope of review and the Council shall consider whether
26 the amendment affects any finding made by the Council in an earlier order.

27 28 **III.A.1. Energy Facility Siting Standards**

29
30 The Council must decide whether the amendment complies with the facility siting standards
31 adopted by the Council. In addition, the Council must impose conditions for the protection
32 of the public health and safety, conditions for the time of commencement and completion of
33 construction conditions to ensure compliance with standards, statutes and rules.⁸

34
35 The Council is not authorized to determine compliance with regulatory programs that have
36 been delegated to another state agency by the federal government.⁹ Nevertheless, the

⁶ OAR 345-022-0010 is the Council's Organizational Expertise Standard, OAR 345-022-0050 is the Retirement and Financial Assurance Standard, and OAR 345-024-0710(1) is the Monetary Path Payment Requirement applicable to the Carbon Dioxide Emissions Standard.

⁷ OAR 345-027-0100(8).

⁸ ORS 469.401(2)

⁹ ORS 469.503(3)

1 Council may consider these programs in the context of its own standards to ensure public
2 health and safety, resource efficiency and protection of the environment.

3
4 The Council has no jurisdiction over design or operational issues that do not relate to siting,
5 such as matters relating to employee health and safety, building code compliance, wage and
6 hour or other labor regulations, or local government fees and charges.¹⁰

7 In making its decision on an amendment of a site certificate, the Council applies the
8 applicable state statutes, administrative rules and local government ordinances that are in
9 effect on the date the Council makes its decision, except when applying the Land Use
10 Standard. In making findings on the Land Use Standard, the Council applies the applicable
11 substantive criteria in effect on the date the certificate holder submitted the request for
12 amendment.¹¹

13
14 III.A.2. General Standard of Review: OAR 345-022-0000

15
16 *W. To issue a site certificate for a proposed facility or to amend a site certificate, the*
17 *Council shall determine that the preponderance of evidence on the record supports*
18 *the following conclusions:*

19
20 *W. The facility complies with the requirements of the Oregon Energy Facility*
21 *Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the*
22 *standards adopted by the Council pursuant to ORS 469.501 or the overall*
23 *public benefits of the facility outweigh the damage to the resources protected*
24 *by the standards the facility does not meet as described in section (2);*

25
26 *(b) Except as provided in OAR 345-022-0030 for land use compliance and except*
27 *for those statutes and rules for which the decision on compliance has been*
28 *delegated by the federal government to a state agency other than the Council, the*
29 *facility complies with all other Oregon statutes and administrative rules identified*
30 *in the project order, as amended, as applicable to the issuance of a site certificate*
31 *for the proposed facility. If the Council finds that applicable Oregon statutes and*
32 *rules, other than those involving federally delegated programs, would impose*
33 *conflicting requirements, the Council shall resolve the conflict consistent with the*
34 *public interest. In resolving the conflict, the Council cannot waive any applicable*
35 *state statute.*

36 * * *

37 The requirements of OAR 345-022-0000 are addressed in the findings of fact and conclusions
38 of law in the sections that follow. Upon consideration of all of the evidence on the record,
39 recommendation of approval is submitted.

40
41

¹⁰ ORS 469.401(4).

¹¹ OAR 345-027-0070(10)

1 III.A.3. Organizational Expertise: OAR 345-022-0010

2
3 *(1) To issue a site certificate, the Council must find that the applicant has the*
4 *organizational expertise to construct, operate and retire the proposed facility in*
5 *compliance with Council standards and conditions of the site certificate. To conclude*
6 *that the applicant has this expertise, the Council must find that the applicant has*
7 *demonstrated the ability to design, construct and operate the proposed facility in*
8 *compliance with site certificate conditions and in a manner that protects public health*
9 *and safety and has demonstrated the ability to restore the site to a useful, non-*
10 *hazardous condition. The Council may consider the applicant's experience, the*
11 *applicant's access to technical expertise and the applicant's past performance in*
12 *constructing, operating and retiring other facilities, including, but not limited to, the*
13 *number and severity of regulatory citations issued to the applicant.*

14
15 *(2) The Council may base its findings under section (1) on a rebuttable presumption*
16 *that an applicant has organizational, managerial and technical expertise, if the*
17 *applicant has an ISO 9000 or ISO 14000 certified program and proposes to design,*
18 *construct and operate the facility according to that program.*

19
20 *(3) If the applicant does not itself obtain a state or local government permit or*
21 *approval for which the Council would ordinarily determine compliance but instead*
22 *relies on a permit or approval issued to a third party, the Council, to issue a site*
23 *certificate, must find that the third party has, or has a reasonable likelihood of*
24 *obtaining, the necessary permit or approval, and that the applicant has, or has a*
25 *reasonable likelihood of entering into, a contractual or other arrangement with the*
26 *third party for access to the resource or service secured by that permit or approval.*

27
28 *(4) If the applicant relies on a permit or approval issued to a third party and the third*
29 *party does not have the necessary permit or approval at the time the Council issues*
30 *the site certificate, the Council may issue the site certificate subject to the condition*
31 *that the certificate holder shall not commence construction or operation as*
32 *appropriate until the third party has obtained the necessary permit or approval and*
33 *the applicant has a contract or other arrangement for access to the resource or*
34 *service secured by that permit or approval.*

35
36 **Findings of Fact**

37
38 Subsections (1) and (2) of the Council's Organizational Expertise Standard require that the
39 certificate holder demonstrate the ability to design, construct, and operate the facility in
40 compliance with Council standards and all site certificate conditions, as well as to restore the
41 site to a useful, non-hazardous condition. Subsections (3) and (4) address third-party
42 permits, which include those permits that the certificate holder relies on a contractor or
43 other third party to obtain.

1 The current site certificate holder is Leaning Juniper Wind Power Facility II, LLC. When the
2 site certificate was originally issued, Leaning Juniper Wind Power Facility II, LLC was a wholly-
3 owned subsidiary of PPM Energy, Inc. Because of its corporate relationship as a subsidiary of
4 PPM Energy, Inc., in the *Final Order on the Application*, the Council found that LJWP, subject
5 to the site certificate conditions, demonstrated the organizational expertise to construct and
6 operate the proposed facility.¹² Those findings are incorporated by this reference.
7 Additionally, in the *Final Order on Amendment 1*, the Council found that even though there
8 had been modification of the corporate organization above LJWP, the site certificate holder
9 still satisfied the Council's Organizational Expertise Standard.¹³

10
11 With regard to third-party permits, in the *Final Order on the Application* and the *Final Order*
12 *on Amendment 1*, the Council found that LJWP did not require or rely on any state or local
13 government permit issued to a third party for the construction and operation of the LJIA
14 and LJIB components of the facility.

15
16 The proposed amendment, dividing LJF into two separate facilities, LJIA and LJIB, does not
17 affect the certificate holder's organizational expertise or impact the Council's previous
18 findings. There has been no change of circumstance affecting the certificate holder's
19 qualifications.

20 21 Conclusion

22
23 Based on the findings discussed above, the Council concludes that LJWP satisfies the
24 Council's Organizational Expertise standard.

25 26 III.A.4. Structural Standard: OAR 345-022-0020

27
28 (1) *Except for facilities described in sections (2) and (3) to issue a site certificate, the*
29 *Council must find that:*

30
31 (a) *The applicant, through appropriate site-specific study, has adequately*
32 *characterized the site as to the Maximum Considered Earthquake Ground Motion*
33 *as shown for the site in the 2009 International Building Code and maximum*
34 *probable ground motion, taking into account ground failure and amplification for*
35 *the site specific soil profile under the maximum credible and maximum probable*
36 *seismic events; and*

37
38 (b) *The applicant can design, engineer, and construct the facility to avoid dangers*
39 *to human safety presented by seismic hazards affecting the site that are expected*
40 *to result from maximum probable ground motion events. As used in this rule*
41 *"seismic hazard" includes ground shaking, ground failure, landslide, liquefaction,*
42 *lateral spreading, tsunami inundation, fault displacement, and subsidence;*

12 *Final Order on the Application* at 18.

13 *Final Order on Amendment 1* at 11.

1 (C) The applicant, through appropriate site-specific study, has adequately
2 characterized the potential geological and soils hazards of the site and its vicinity
3 that could, in the absence of a seismic event, adversely affect, or be aggravated
4 by, the construction and operation of the proposed facility; and
5

6 (d) The applicant can design, engineer and construct the facility to avoid dangers
7 to human safety presented by the hazards identified in subsection I.
8

9 (2) The Council may issue a site certificate for a facility that would produce power
10 from wind, solar or geothermal energy without making the findings described in
11 section (1). However, the Council may apply the requirements of section (1) to impose
12 conditions on a site certificate issued for such a facility
13

14 **Findings of Fact**

15
16 Pursuant to the rule, the Council may issue a site certificate without making findings with
17 respect to the Structural Standard; however the rule also authorizes the Council to impose
18 site certificate conditions based upon the requirements of the standard. In the *Final Order*
19 *on the Application*, the Council adopted site certificate Conditions 12, 13, 14, 49, 50 and 51
20 to address the potential seismic and non-seismic geologic hazards at the facility site.¹⁴ The
21 Council's previous findings and conclusions are incorporated by this reference. In the *Final*
22 *Order on Amendment 1*, the Council modified Condition 49 to require a site-specific
23 geotechnical investigation before beginning construction of any phase of the facility. The
24 Council found no other necessary changes to the site certificate conditions related to the
25 Structural Standard.¹⁵
26

27 Amendment 2 seeks to divide the facility into two separate facilities within the approved site
28 boundary. LJIA and LJIB are operational, and Amendment 2 would not result in the
29 placement of facility components within geologic areas that have not been addressed by the
30 Council. The Council recommends that Condition 49 be amended as applicable to each
31 facility, with no additional changes necessary.
32

33 **Conclusion**

34
35 The Council concludes that, as amended, LJIA and LJIB, comply with the Council's Structural
36 Standard.
37

38 **III.A.5. Soil Protection: OAR 345-022-0022**

39
40 *To issue a site certificate, the Council must find that the design, construction and*
41 *operation of the facility, taking into account mitigation, are not likely to result in a*

¹⁴ *Final Order on the Application* at 104.

¹⁵ *Final Order on Amendment 1* at 76.

1 *significant adverse impact to soils including, but not limited to, erosion and chemical*
2 *factors such as salt deposition from cooling towers, land application of liquid effluent,*
3 *and chemical spills.*

4
5 **Findings of Fact**

6
7 The Soil Protection Standard requires the Council to find that the design, construction and
8 operation of the facility are not likely to result in significant adverse impacts to soil.

9
10 In the *Final Order on the Application*, the Council found that the design, construction and
11 operation of the proposed facility, taking into account mitigation, would not result in a
12 significant adverse impact to soil. Therefore, the Council concluded that the facility complied
13 with the Soil Protection Standard.¹⁶ Those findings are incorporated by this reference. To
14 further mitigate the potential impacts to soil during construction and operation, the Council
15 adopted Conditions 60, 70, 71, 74, 75 and 77.

16
17 In the *Final Order on Amendment 1*, the Council found that the design, construction and
18 operation of the facility, including the proposed LJIB components, would not result in
19 significant adverse impacts to soils, taking into account the mitigation required by the site
20 certificate conditions.¹⁷ Those findings are incorporated by this reference.

21
22 Amendment 2 seeks to divide the facility into two separate facilities within the existing
23 approved site boundary. Because the site boundary would not be changed, approval of the
24 amendment would not result in any soil impacts that have not been addressed by the
25 Council in a previous order. In addition, LJIA and LJIB are operational and the proposed
26 division of the facility would not alter the facts upon which the Council relied in its previous
27 findings regarding soil impacts. The Council modifies Condition 74 to incorporate
28 modifications to the *Revegetation Plan* as applicable to each facility. The Council finds that
29 no additional changes are necessary to the other site certificate conditions regarding soil
30 protection (Conditions 60, 70, 71, 75 and 77). The Council finds that the design, construction
31 and operation of the LJIA and LJIB facilities would not likely result in significant adverse
32 impacts to soils, taking into account the mitigation required by the site certificate conditions.

33
34 **Conclusion**

35
36 The Council concludes that, as amended, LJIA and LJIB, comply with the Council's Soil
37 Protection Standard.

38
39
40
41

¹⁶ *Final Order on the Application* at 53.

¹⁷ *Final Order on Amendment 1* at 46.

1 III.A.6. Land Use: OAR 345-022-0030

2
3 (1) *To issue a site certificate, the Council must find that the proposed facility complies with*
4 *the statewide planning goals adopted by the Land Conservation and Development*
5 *Commission.*

6
7 (2) *The Council shall find that a proposed facility complies with section (1) if:*

8
9 (a) *The applicant elects to obtain local land use approvals under ORS*
10 *469.504(1)(a) and the Council finds that the facility has received local land use*
11 *approval under the acknowledged comprehensive plan and land use regulations*
12 *of the affected local government; or*

13
14 (b) *The applicant elects to obtain a Council determination under ORS*
15 *469.504(1)(b) and the Council determines that:*

16
17 (A) *The proposed facility complies with applicable substantive criteria as*
18 *described in section (3) and the facility complies with any Land Conservation and*
19 *Development Commission administrative rules and goals and any land use*
20 *statutes directly applicable to the facility under ORS 197.646(3);*

21
22 (B) *For a proposed facility that does not comply with one or more of the*
23 *applicable substantive criteria as described in section (3), the facility otherwise*
24 *complies with the statewide planning goals or an exception to any applicable*
25 *statewide planning goal is justified under section (4); or*

26
27 (C) *For a proposed facility that the Council decides, under sections (3) or (6), to*
28 *evaluate against the statewide planning goals, the proposed facility complies*
29 *with the applicable statewide planning goals or that an exception to any*
30 *applicable statewide planning goal is justified under section (4).*

31
32 ***

33 Findings of Fact

34
35 The Land Use Standard requires the Council to find that a proposed facility complies with the
36 statewide planning goals adopted by the Land Conservation and Development Commission.
37 The Council must apply the Land Use Standard in conformance with the requirements in ORS
38 469.504. The Oregon Supreme Court has held "under ORS 469.504(1)(b) and (5), the Council
39 may choose to determine compliance with statewide planning goals by evaluating a facility
40 under paragraph (A) or (B) or (C), but...it may not combine elements or methods from more
41 than one paragraph, except to the extent that the chosen paragraph itself permits."

42
43 The Council may find compliance with statewide planning goals under ORS 469.504(1)(b)(A)
44 if the Council finds that the proposed facility "complies with applicable substantive criteria
45 from the affected local government's acknowledged comprehensive plan and land use
46 regulations that are required by the statewide planning goals and in effect on the date the

1 application is submitted.” Under ORS 469.504(1)(b)(B) the Council must determine whether
2 the proposed facility “otherwise [complies] with the applicable statewide planning goals.” In
3 *Save Our Rural Oregon*, the Oregon Supreme Court held that “paragraph (B) necessarily
4 requires an evaluation of the same applicable substantive criteria as paragraph (A) and, to
5 the extent those criteria are not met, directs the council to consider statewide planning
6 goals.” However, the Council may not evaluate a proposed facility under both subparagraph
7 (A) and subparagraph (B).

8
9 Under ORS 469.504(5), the Council must apply the applicable substantive criteria
10 recommended by the Special Advisory Group (SAG). Gilliam County is the affected local
11 government and, as such, the Council appointed Gilliam County Court, the Gilliam County
12 governing body, as the SAG for the LWF application and amendment review processes.¹⁸

13
14 In the *Final Order on the Application*, the Council determined the following as applicable
15 substantive criteria: Gilliam County Zoning Ordinance (GCZO) Sections 4.020(A),
16 4.020(D)(14), 4.020(J), 7.010(A)(1), 7.010(A)(2), 7.020(Q), 7.020(T). The Council found that
17 the Facility complied with the applicable substantive criteria, except GCZO section
18 4.020(D)(14), which limited the area that a commercial utility facility may occupy in an
19 Exclusive Farm Use Zone.¹⁹ Therefore, in accordance with ORS 469.504(1)(b)(B), the Council
20 reviewed the Facility to determine compliance with the applicable statewide planning goal
21 (Goal 3).²⁰ The Council found that the proposed principal use and access roads would
22 “preclude more than 20 acres from use as a commercial agricultural enterprise” and that the
23 facility, consequently, would not comply with OAR 660-033-0130(22), which implements
24 Goal 3.²¹ However, the Council determined that an exception to Goal 3 was justified under
25 ORS 469.504(2), and, therefore, found compliance under ORS 469.504(1)(b)(B). In addition,
26 the Council adopted the following Conditions relating to the land use standard: 28, 36, 39,
27 40, 41, 42, 43, 44, 70, 71, 74, 75, 82, 90, 92, 97, 98, 99, and 100. The Council’s previous
28 findings are incorporated by this reference.²²

29
¹⁸ EFSC, In the Matter of the Request for Amendment 2 for the Leaning Juniper II Wind Power Facility, Order Appointing a Special Advisory Group (December 7, 2012).

¹⁹ GCZO Section 4.020(D)(14) provides that a power generation facility not located on high value farmland must not “preclude more than 20 acres from use as a commercial agricultural enterprise” and a power generation facility located on high value farmland must not “preclude more than 12 acres from use as a commercial agricultural enterprise.”

²⁰ Under Goal 3, non-farm uses are permitted within a farm use zone as provided under ORS 215.283. To find compliance with ORS 215.283, the Council must determine whether the proposed energy facility and its related or supporting facilities are uses that fit within the scope of the uses permitted on EFU land described in ORS 215.283(1), (2) or (3).

²¹ OAR Chapter 660, Division 33, contains the Land Conservation and Development administrative rules for implementing the requirements for agricultural land as defined by Goal 3. Prior to 2009 the standards found in OAR 660-033-0130(5) and (22) applied to a wind power facility proposed to be located on non-high-value farmland and OAR 660-033-0130(5) and (17) applied to such a facility proposed to be located on high-value farmland.

²² *Final Order on the Application* at 52.

1 Because Amendment 1 included an extension of the construction completion date as well as
2 an expansion of the site boundary, the Council considered whether the facility as a whole
3 complied with the Land Use Standard. In the *Final Order on Amendment 1*, the Council
4 applied the applicable substantive criteria in effect on the date the certificate holder
5 submitted the request for amendment and determined the following as applicable
6 substantive criteria: GCZO Sections 4.020(A), 4.020(D)(14), 4.010(J), 7.010(A)(1), 7.010(A)(2),
7 7.020(Q) and 7.020(T). The Council found that the facility, including the proposed LJIIB
8 components, complied with all applicable substantive criteria from Gilliam County except
9 GCZO Section 4.020(D)(14).²³ The Council proceeded with the land use analysis under ORS
10 469.504(1)(b)(B) to determine whether the facility would “otherwise comply with the
11 applicable statewide planning goals.”²⁴ Again, the Council determined Goal 3 was the
12 applicable statewide planning goal, and found that if the new LCDC rules applied, the facility,
13 including LJIIB components, complied with the applicable statewide planning goal;²⁵
14 conversely, if the old LCDC rules applied, the facility, including the LJIIB components, did not
15 comply with the applicable statewide planning goal.²⁶ However, the Council found that an
16 exception to Goal 3 was justified, and concluded that the facility, as amended to include
17 LJIIB, complied with the Land Use Standard.²⁷ The Council’s previous findings are
18 incorporated by this reference.

19
20 In considering this amendment request, pursuant to OAR 345-027-0070(10), the Council
21 must apply the applicable substantive criteria in effect on the date the certificate holder
22 submitted the request for amendment. On December 20, 2012, the Department sent
23 Gilliam County Court a letter explaining its appointment as a SAG for the facility and a
24 description of the SAGs role in the amendment review process. The letter included and
25 highlighted the SAG’s responsibility to submit applicable substantive criteria and as
26 requested by the Department. On January 11, 2013, the Department sent out a Memo to
27 Reviewing Agencies, including Gilliam County Court, requesting comment and input on the
28 amendment request by February 11, 2013. Gilliam County Court did not submit comment or
29 its recommendation for applicable substantive criteria by the February 11, 2013 deadline but
30 on March 27, 2013, the Department received a letter confirming that the SAG had adopted

²³ The Council found that the LJIIB principal use and access roads would occupy up to 24 acres of high-value farmland and 48 acres of non-high-value farmland. Therefore, the components would occupy more than 12 acres of high-value farmland and more than 20 acres of non-high-value farmland, in direct contravention with GCZO Section 4.020(D)(14). *Final Order on Amendment 1* at 22.

²⁴ *Final Order on Amendment 1* at 32.

²⁵ OAR 660-033-0130(37) became effective on January 2, 2009. At the same time, LCDC adopted amendments to OAR 660-033-0120 (Table 1) that added reference to a “wind power generation facility” as a distinct type “R” use. The amendment provided that OAR 660-033-0130(5) and (37) applied to wind power generation facilities. The effect of these amendments was to eliminate the 12-acre and 20-acre restrictions on wind power generation facilities that were contained in OAR 660-033-0130(17) and (22) and to impose, instead, new restrictions on wind power generation facilities contained in OAR 660-033-0130(37). At the time of the amendment request, Gilliam County had yet to incorporate the changes into their local zoning ordinance.

²⁶ The Council found that the facility would occupy more than 12 acres of high-value farmland and more than 20 acres of non-high-value farmland. Therefore, the facility, as amended, did not comply with OAR 660-033-0130(17) and (22); therefore, the facility did not comply with the rules implementing Goal 3.

²⁷ *Final Order on the Amendment 1* at 45.

1 the Gilliam County Planning Director's recommendation contained in her December 4, 2012
2 letter to the certificate holder regarding the applicability of the amended GCZO to permitted
3 wind facilities.

4
5 In October 2011, Gilliam County Court adopted amendments to the Gilliam County
6 Comprehensive Plan and Land Development Ordinance (GCZO), adopting revised and new
7 standards for wind energy facilities including the amendments of OAR 660-033-0120 and
8 660-033-0130. Accordingly, the Council concludes that the applicable substantive criteria
9 are those provisions from the amended GCZO.²⁸ Nonetheless, as discussed previously, the
10 Council's scope of review is established under OAR 345-027-0070(10). In accordance with
11 the established scope of review, the Council must consider only whether this amendment
12 request would affect any finding made by the Council in an earlier order.

13
14 Amendment 2 would divide the facility into two separate facilities within the approved site
15 boundary. LJIIA and LJIIB are operational, and approval of the amendment would not result
16 in any land use impacts that have not been addressed by the Council. The amendment would
17 not expand the site boundary or alter the authorized uses. The proposed division of the
18 facility would not change the facts upon which the Council relied in its previous findings
19 regarding land use, and the amendment would not affect any finding made by the Council in
20 an earlier order.

21
22 **Conclusion**

23
24 Based on these findings, the Council concludes that, as amended, LJIIA and LJIIB comply with
25 the Council's Land Use Standard.

26
27 **III.A.7. Protected Areas: OAR 345-022-0040**

28
29 *(1) Except as provided in sections (2) and (3), the Council shall not issue a site*
30 *certificate for a proposed facility located in the areas listed below. To issue a site*
31 *certificate for a proposed facility located outside the areas listed below, the Council*
32 *must find that, taking into account mitigation, the design, construction and operation*
33 *of the facility are not likely to result in significant adverse impact to the areas listed*
34 *below. References in this rule to protected areas designated under federal or state*
35 *statutes or regulations are to the designations in effect as of May 11, 2007:*

36
37 *(a) National parks, including but not limited to Crater Lake National Park and Fort*
38 *Clatsop National Memorial;*
39

²⁸ The Department acknowledges that Gilliam County and the certificate holder take the position that the amended GZCO does not apply to the facility, for the reasons set forth in the County's December 4, 2012 and March 28, 2013 letters and in the certificate holder's Request for Amendment and Joint Response to Comments.

1 (b) National monuments, including but not limited to John Day Fossil Bed National
2 Monument, Newberry National Volcanic Monument and Oregon Caves National
3 Monument;

4
5 (c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et
6 seq. and areas recommended for designation as wilderness areas pursuant to 43
7 U.S.C. 1782;

8
9 (d) National and state wildlife refuges, including but not limited to Ankeny,
10 Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat,
11 Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower
12 Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks,
13 Umatilla, Upper Klamath, and William L. Finley;

14
15 (e) National coordination areas, including but not limited to Government Island,
16 Ochoco and Summer Lake;

17
18 (f) National and state fish hatcheries, including but not limited to Eagle Creek and
19 Warm Springs;

20
21 (g) National recreation and scenic areas, including but not limited to Oregon
22 Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the
23 Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic
24 Area;

25
26 (h) State parks and waysides as listed by the Oregon Department of Parks and
27 Recreation and the Willamette River Greenway;

28
29 (i) State natural heritage areas listed in the Oregon Register of Natural Heritage
30 Areas pursuant to ORS 273.581;

31
32 (j) State estuarine sanctuaries, including but not limited to South Slough Estuarine
33 Sanctuary, OAR Chapter 142;

34
35 (k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers
36 designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers
37 listed as potentials for designation;

38
39 (l) Experimental areas established by the Rangeland Resources Program, College
40 of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw
41 Butte) site, the Starkey site and the Union site;

42
43 (m) Agricultural experimental stations established by the College of Agriculture,
44 Oregon State University, including but not limited to: Coastal Oregon Marine

1 Experiment Station, Astoria Mid-Columbia Agriculture Research and Extension
2 Center, Hood River Agriculture Research and Extension Center, Hermiston
3 Columbia Basin Agriculture Research Center, Pendleton Columbia Basin
4 Agriculture Research Center, Moro North Willamette Research and Extension
5 Center, Aurora East Oregon Agriculture Research Center, Union Malheur
6 Experiment Station, Ontario Eastern Oregon Agriculture Research Center, Burns
7 Eastern Oregon Agriculture Research Center, Squaw Butte Central Oregon
8 Experiment Station, Madras Central Oregon Experiment Station, Powell Butte
9 Central Oregon Experiment Station, Redmond Central Station, Corvallis Coastal
10 Oregon Marine Experiment Station, Newport Southern Oregon Experiment
11 Station, Medford Klamath Experiment Station, Klamath Falls;

12
13 (n) Research forests established by the College of Forestry, Oregon State
14 University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the
15 Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area
16 and the Marchel Tract;

17
18 (o) Bureau of Land Management areas of critical environmental concern,
19 outstanding natural areas and research natural areas;

20
21 (p) State wildlife areas and management areas identified in OAR chapter 635,
22 Division 8.

23 ***

24
25 **Findings of Fact**

26
27 In the *Final Order on the Application*, the Council found that the facility, as proposed, was
28 not located in any protected area listed in OAR 345-022-0040 and that the design,
29 construction and operation of the facility, taking mitigation into account, would not result in
30 significant adverse impacts to the protected areas.²⁹ Those findings are incorporated by this
31 reference.

32
33 In the *Final Order on Amendment 1*, the Council found that the previous findings in the *Final*
34 *Order on the Application* regarding potential impacts on protected areas applied to the LJIB
35 components and that the no part of the amended facility was located on any protected area
36 listed in OAR 345-022-0040. The Council concluded that the design, construction and
37 operation of the facility would not result in significant adverse impacts to any protected
38 area.³⁰ The Council's previous findings are incorporated by this reference.

39
40 Amendment 2 seeks to divide the facility into two separate facilities within the approved site
41 boundary. Approval of the amendment would not result in any impacts to Protected Areas

²⁹ *Final Order on the Application* at 57.

³⁰ *Final Order on Amendment 1* at 49.

1 that have not been addressed by the Council. LJIA and LJIB are operational and the
2 proposed division of the facility would not alter the facts upon which the Council relied in its
3 previous findings. The Council finds that LJIA and LJIB are not located in any protected area
4 listed in OAR 345-022-0040 and that the design, construction and operation of the facilities
5 are not likely to result in significant adverse impacts.

6
7 **Conclusion**

8
9 The Council concludes that, as amended, LJIA and LJIB comply with the Council's Protected
10 Areas Standard.

11
12 **III.A.8. Retirement and Financial Assurance: OAR 345-022-0050**

13
14 *To issue a site certificate, the Council must find that:*

15
16 *(1) The site, taking into account mitigation, can be restored adequately to a*
17 *useful, non-hazardous condition following permanent cessation of construction or*
18 *operation of the facility.*

19
20 *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in*
21 *a form and amount satisfactory to the Council to restore the site to a useful, non-*
22 *hazardous condition.*

23
24 **Findings of Fact**

25
26 The Council must find that the site can be restored to a useful, non-hazardous condition
27 following permanent cessation, and that the certificate holder has a reasonable likelihood of
28 obtaining a bond or comparable security, satisfactory to the Council, in an amount adequate
29 to restore the site.

30
31 In the *Final Order on the Application*, the Council found that the facility site could be
32 restored adequately to a useful, non-hazardous condition following permanent cessation of
33 construction or operation of the facility.³¹ The Council found that the certificate holder had
34 demonstrated a reasonable likelihood of obtaining a bond or letter of credit, satisfactory to
35 the Council, in an amount adequate to restore the site.³² Those findings are incorporated by
36 this reference.

37
38 In the *Final Order on Amendment 1*, the Council found that the facility site (including LJIA
39 and LJIB), taking mitigation into account, could be restored adequately to a useful, non-

³¹ *Final Order on the Application* at 25.
³² *Final Order on the Application* at 25. Condition 30 allows for an adjustment of the financial assurance amount prior to the beginning of construction, based on the final design configuration.

1 hazardous condition following permanent cessation of construction or operation of the
2 facility.³³ The Council adopted Condition 101, allowing the certificate holder to adjust the
3 amount of the initial bond or letter of credit for LJIB based on the final design configuration
4 of the facility, subject to Department approval. Based on its findings, the Council concluded
5 that LWP demonstrated a reasonable likelihood of obtaining bonds or letters of credit,
6 satisfactory to the Council, adequate to restore the site to a useful, non-hazardous
7 condition.³⁴ The Council's previous findings are incorporated by this reference.

8
9 As established in Change Order 2, LWP will be making minor modifications to the LJIA
10 collector substation that is located near BPA's Jones Canyon substation to provide physical
11 separation between the LJIA and LJIB equipment. The approved Change Order estimated
12 the cost to restore the facility, inclusive of the minor modifications, and per ODOE's request,
13 the cost of dismantling and disposing of the substation yard near BPA's Jones Canyon
14 substation was accounted for in both the LJIA and LJIB cost estimates for restoration.³⁵ The
15 LJIB cost estimate also includes the LJIB collector substation located south of Cedar Springs
16 Road near the LJIB turbines. The revised estimate for site restoration is 10.284 million
17 dollars, which is less than the currently held bond of \$10,766 million dollars.

18
19 The certificate holder estimated the site restoration costs for LJIA and LJIB in Table 1 below.
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38

³³ *Final Order on Amendment 1* at 15.

³⁴ *Final Order on Amendment 1* at 18.

³⁵ In the Change Order, the department established that "in the event that LJIA and LJIB... become separate facilities, ODOE would likely consider the substation to be shared. That is, the costs associated with removing the substation and restoring the site within the substation fence line would be included in the restoration cost calculation for both facilities."

1 **Table 1**

2

LEANING JUNIPER IIA POST CONSTRUCTION SUBMITTAL

Site Restoration Cost Estimate (1st Quarter 2010 Dollars)

Compliance with Condition 10f of the Final Order on Amendment #1 to the Site Certificate for Leaning Juniper II

Cost Estimate Component	Quantity	Unit Cost	Extension
<u>Turbines and Towers</u>			
Disconnect electrical and ready for disassembly (per tower)	43	\$979	\$42,087
Remove turbine blades and hubs (per tower)	43	\$5,207	\$223,901
Remove turbine ntowers (per net ton of steel)	12,438	\$67.00	\$833,212
Remove and load pad transformers (per tower)	43	\$2,250	\$96,750
Foundation and Transformer pad removal (per cubic yard of concrete)	2,183	\$32.00	\$70,176
Restore turbine turnouts (per tower)	43	\$1,297	\$55,771
<u>Met Towers</u>			
Dismantle and dispose of met towers (per tower)	2	\$9,037	\$18,274
<u>Substation and O&M Building</u>			
Dismantle and dispose of collector substation	2	\$139,607	\$267,214
Dismantle and dispose of O&M Facility	1	\$47,158	\$47,158
<u>Transmission Line</u>			
Remove above-ground 34.5-kV collector (per mile)	2.61	\$3,390	\$8,848
Remove 230-kV transmission line (per mile)	0.21	\$48,520	\$9,985
Remove below-ground 34.5-kV collector and junction boxes (each)	18	\$1,322	\$21,182
<u>Access Roads</u>			
Road removal, grading and seeding (per mile)	13.67	\$74,488	\$1,018,224
<u>Temporary Areas</u>			
Seed temporarily disturbed areas (per acre)	158.3	\$2,775	\$440,781
<u>General Costs</u>			
Permits, mobilization, engineering, overhead, utility disconnects (unit cost)	1	\$444,403	\$444,403
Subtotal			\$3,598,954
Subtotal Adjusted to 1st Quarter 2011 Dollars		1.1110	\$3,998,437
Performance Bond		1%	\$39,984
Gross Cost			\$4,038,422
Administration and Project Management		10%	\$403,842
Future Developments Contingency		10%	\$403,842
Total Site Restoration Cost			\$4,846,106
Total Site Restoration Cost (Rounded To Nearest \$1,000)			\$4,846,000

4

LEANING JUNIPER IIB POST-CONSTRUCTION SUBMITTAL

Site Restoration Cost Estimate (1st Quarter 2011 Dollars)

Compliance with Condition 101 of the Final Order on Amendment #1 to the Site Certificate for Leaning Juniper II

Cost Estimate Component	Quantity	Unit Cost	Extension
Turbines			
Disconnect electrical and ready for disassembly (per tower)	74	\$1,050	\$77,700
Remove turbine blades and hubs (per tower)	74	\$5,594	\$413,956
Remove turbine towers (per net ton of steel)	15,280	\$72.01	\$1,172,323
Remove and load pad transformers (per tower)	74	\$2,417	\$178,858
Foundations and Transformer pad removal (per cubic yard of concrete)	3,478	\$47.34	\$164,649
Met Towers			
Dismantle and dispose of met towers (per tower)	2	\$9,921	\$17,842
Substation and O&M Building			
Dismantle and dispose of collector substation	1	\$84,602	\$84,602
Dismantle and dispose of O&M Facility	1	\$47,156	\$47,156
Transmission Line			
Remove above-ground 34.5-kV collector (per mile)	1.99	\$5,241	\$10,414
Remove 230-kV transmission line (per mile)	6.43	\$22,593	\$145,160
Remove junction boxes (each)	12	\$1,420	\$17,040
Access Roads			
Road removal, grading and seeding (per mile)	14.97	\$21,887	\$327,627
Temporary Areas			
Access roads and met towers (per acre)	74.62	\$6,001	\$447,795
Transmission lines, staging areas, crane paths (per acre)	153	\$2,985	\$457,511
General Costs			
Permits, mobilization, engineering, overhead, utility disconnects (unit cost)	1	\$476,172	\$476,172
Subtotal			\$4,038,803
Subtotal Adjusted to 1st Quarter 2011 Dollars		1.1110	\$4,487,110
Performance Bond		1%	\$44,871
Gross Cost			\$4,531,982
Administration and Project Management		10%	\$453,198
Future Developments Contingency		10%	\$453,198
Total Site Restoration Cost			\$5,438,378
Total Site Restoration Cost (Rounded To Nearest \$1,000)			\$5,438,000

Based on the above information, the Council finds that the following site restoration cost estimates for the two facilities are reasonable:

- LJIA: \$4.846 million
- LJIB: \$5.438 million

OAR 345-022-0050(2) requires the Council to determine whether the certificate holder has a reasonable likelihood of obtaining bonds or letters of credit, in a form and amount satisfactory to the Council, to restore the sites to a useful, non-hazardous condition.

LJWP, the current site certificate holder, holds a bond for the facility, which includes LJIA and LJIB. The bond amount was recently adjusted to 2013 First Quarter dollars and continued in February 2013. The bond provided by Westchester Fire Insurance Company covers the estimated cost for site restoration. The current bond will remain in place and will not be cancelled prior to ODOE receiving revised bonds or letters of credit from LJWP and/or PGE.

1 The Department received one public comment concerning LJWP's ability to comply with the
2 Retirement and Financial Assurance Standard, which is summarized above in Section II.D.,
3 addressed below.

4
5 The Council's Retirement and Financial Assurance Standard protects the public and ensures
6 that the facility, even if the certificate holder no longer exists, can be retired to a useful,
7 nonhazardous condition.³⁶ The Council standard does not require the Council to consider the
8 amount of public funding that has been extended to any certificate holder. As discussed
9 above in the *Final Order on the Application* and the *Final Order on Amendment 1*, the Council
10 found that the certificate holder demonstrated a reasonable likelihood of obtaining a bond
11 or letter of credit, satisfactory to the Council, adequate to restore the site to a useful, non-
12 hazardous condition. Further, per Change Order 2, the revised estimate for site restoration is
13 10.284 million dollars, which is less than the currently held bond of 10.766 million dollars,
14 and the bond will not be cancelled until ODOE receives revised bonds from LJWP and PGE
15 (LJIA and LJIB), should the transfer occur. This amendment request does not seek to enlarge
16 the existing site boundary or change the physical components of LJF. Therefore, it is not
17 necessary to recalculate the decommissioning costs for purposes of this amendment
18 request.

19
20 Amendment 2 would not affect any of the Council's previous findings, nor does the
21 amendment request any changes that would alter the basis for the Council's earlier findings.
22 The Council finds that the certificate holder has demonstrated a reasonable likelihood of
23 obtaining bonds or letters of credit, satisfactory to the Council, in amounts adequate to
24 restore LJIA and LJIB sites to a useful, non-hazardous condition.

25 26 **Conclusion**

27
28 Based on these findings, the Council concludes that, as amended, LJIA and LJIB comply with
29 the Council's Retirement and Financial Assurance Standard.

30 31 **III.A.9. Fish and Wildlife Habitat: OAR 345-022-0060**

32
33 *To issue a site certificate, the Council must find that the design, construction and*
34 *operation of the facility, taking into account mitigation, are consistent with the fish*
35 *and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as*
36 *of September 1, 2000.*

37
38
39
40

³⁶ The Department (on behalf of the State of Oregon) would contact the bond holder and draw upon the surety bond. The bond holder would provide the bond money to the State and the State would use that money to contract out decommissioning the facility.

1 **Findings of Fact**

2
3 The Fish and Wildlife Standard requires the Council to find that the design, construction, and
4 operation of the facility are consistent with fish and wildlife habitat mitigation goals as set
5 forth in OAR 635-415-0025.

6
7 In the *Final Order on the Application*, the Council found that the design, construction and
8 operation of the proposed facility, taking into account mitigation and subject to the site
9 certificate conditions, would be consistent with ODFW's habitat mitigation goals and
10 standards. The Council made findings regarding the characteristics of the habitat types
11 within the site boundary and the State sensitive species observed within or near the lease
12 boundaries during avian point-counts and other wildlife surveys.³⁷ To estimate the maximum
13 habitat impacts that could result from construction of the facility, the applicant assumed a
14 layout of turbines and other facility components within the micro-siting corridors that would
15 maximize the impact on higher-value habitat. The maximum impact habitat assessment for
16 LJIA is shown in Table 11 of the *Final Order*. Based upon its findings the Council concluded
17 that the facility complied with the Council's Fish and Wildlife Habitat Standard.³⁸ The
18 Council's previous findings are incorporated by this reference.

19
20 As previously discussed, Amendment 1 authorized the site certificate holder to expand the
21 site and construct and operate up to 84 wind turbines with a combined peak generating
22 capacity of up to 186 MW together with related or supporting facilities within a new
23 micro-siting area of approximately 7,962 acres (LJIIB).³⁹ In the *Final Order on Amendment 1*,
24 the Council found that the facility, including the LJIIB components, would comply with the
25 Council's Fish and Wildlife Habitat Standard. The Council reviewed the habitat assessment
26 presented in the amendment request and evaluated the potential habitat impacts of LJIA
27 and LJIIB, establishing a required mitigation area for the whole facility. The Council found
28 that for the facility as a whole, a mitigation area of up to 92 acres would be needed,
29 recognizing that the actual size of the mitigation area would be smaller based upon the final
30 design configuration of LJIIB.⁴⁰ Further, the Council applied the previously adopted
31 conditions in the site certificate to LJIIB, subject to some modification.⁴¹ The Council's

³⁷ *Final Order on the Application* at 82-91.

³⁸ *Id.* at 103.

³⁹ Request for Amendment #1, Section 1, p. 1, Response to RAI, Summary of Modifications, p. 1, and Response to Additional RAI (table) #1, p. 2, and #14, p. 19, and Attachment 2, "Table 3-Revised: Habitat Types and Categories in the Amended Site Boundary for LJIIB with Area of Impact."

⁴⁰ The Council determined that 39 acres were required for LJIA and 53 acres for LJIIB. Before beginning construction of any phase, the certificate holder had to determine the final size of the mitigation area needed for that phase, and determine the boundaries of the mitigation area in consultation with ODFW and the affected landowners, subject to the approval of the Department. The final mitigation area had to contain suitable habitat to achieve the ODFW mitigation goals through appropriate enhancement activities.

⁴¹ Condition 74 was revised to update the cross-reference where the applicable Revegetation Plan could be found; Condition 83 was modified to apply the current Avian Power Line Interaction Committee guidance issued in 2006; Condition 84 was modified to require exclusion fencing around identified populations of a state-listed threatened plant species; Condition 87 was revised to update the cross-reference where the applicable Wildlife Monitoring and Mitigation Plan could be found; Condition 88 was modified to clarify that the Incidental Take

1 previous findings and conclusions are incorporated by this reference. Based upon its findings
2 and modified site certificate conditions the Council concluded that the facility as a whole,
3 including LJIA and LJIB, would comply with the Council's Fish and Wildlife Habitat Standard.
4

5 As described in the annual report provided to ODOE on April 25, 2011, LJWP calculated the
6 required mitigation area habitat impacts from the final as-built facilities to be 28.07 acres for
7 LJIA and 18.36 acres for LJIB totaling 46.43 acres. This is 45.47 acres less than the secured
8 conservation easement.⁴²
9

10 Amendment 2 seeks to divide the facility into two separate facilities within the approved site
11 boundary. Approval of the amendment would not result in any impacts to Fish and Wildlife
12 that have not been addressed by the Council. In addition, LJIA and LJIB are operational and
13 the proposed division of the facility would not alter the facts upon which the Council relied
14 in its previous findings. Therefore, the amendment would not affect the Council's previous
15 findings.
16

17 In response to the Department's request for comments, ODOE received two comments
18 regarding wildlife obligations and impacts, described above in Section II.C. and II.D.
19

20 As noted above, the amendment request will not affect the Council's previous findings. With
21 respect to the transfer, LJWP and PGE will be bound by all requirements and obligations of
22 the LJIA and LJIB site certificate, respectively. Further, for thorough review, PGE and LJWP
23 will coordinate efforts on monitoring and reporting obligations. Specifically, for fatality
24 monitoring, if the ownership transfer of LJIB occurs prior to the end of the second year of
25 monitoring, LJWP and PGE will coordinate review of the second year study and report the
26 results in a joint report to ODOE. The current LJF Wildlife Monitoring and Mitigation Plan
27 requires, for the purposes of determining whether a threshold has been exceeded, that the
28 average annual fatality rates for species groups be calculated after two years of monitoring.
29 When LJIB was approved and added to the LJF with Amendment #1, ODOE did not establish
30 independent thresholds for LJIA and LJIB. Therefore, the average annual fatality rate for
31 species groups will continue to be calculated for LJIA and LJIB combined after two years of
32 monitoring. LJWP and PGE will coordinate their review of the second year study and report
33 results and jointly submit the second year study and report results to ODOE.
34

35 Further, the site certificate, including the Wildlife Monitoring and Mitigation Plan, the
36 Habitat Mitigation Plan, and the Revegetation Plan imposed as conditions of approval,
37 requires several ongoing studies during the operation of the LJF. LJWP and PGE will address
38 the monitoring and reporting requirements in each plan for LJIA and LJIB respectively,
39 should the transfer occur.

Permit was required prior to construction for LJIA but not LJIB; Condition 89 was modified to update the cross-reference where the applicable Habitat Mitigation Plan could be found.

⁴² Pursuant to Amendment 1, LJWP secured a habitat mitigation area, approved by ODOE and ODFW, for a conservation easement covering 92 acres.

1 If the ownership transfer occurs, after the closing, LJWP and PGE will provide separate
2 reports to the Department for subsequent raptor nest and Washington ground squirrel
3 surveys for LJIA and LJIB respectively. The Grassland bird survey is being conducted on the
4 LJIA site currently, will apply to both LJIA and LJIB facilities and LJWP and PGE will
5 coordinate their review of the second year study and jointly report the result to the
6 Department. LJWP and PGE will provide separate reports to the Department for LJIA and
7 LJIB, respectively for wildlife reporting and handling. With regard to revegetation, if the
8 ownership transfer occurs prior to the end of the third year of monitoring (2013), LJWP and
9 PGE must coordinate their review of the third year study and report the results to the
10 Department in a joint report. For all years after 2013, to the extent additional reports are
11 needed, LJWP and PGE will provide separate reports to ODOE for LJIA and LJIB,
12 respectively. Regarding the habitat mitigation area, upon closing of the asset purchase
13 agreement, PGE will acquire the rights, title and interest to a 36 acre portion of the
14 conservation easement, pro-rated for the LJIB component. PGE and LJWP will coordinate
15 the review of monitoring and reporting results and jointly submit the report results to the
16 Department. For annual reports, LJWP and PGE will coordinate the preparation and
17 submission of separate annual reports.

18
19 The *Final Order on the Application* and the *Final Order on Amendment 1* describe site
20 certificate conditions for mitigation of potential impacts to wildlife and wildlife habitat. The
21 Council applies each condition regarding wildlife and wildlife habitat impact mitigation to
22 each of the facilities and modifies the conditions as appropriate for each facility.

23 24 Conclusion

25
26 For the reasons discussed above and subject to the site certificate conditions, the Council
27 finds that LJIA and LJIB, as amended, comply with the Council's Fish and Wildlife Standard.

28 29 III.A.10. Threatened and Endangered Species: OAR 345-022-0070

30
31 *To issue a site certificate, the Council, after consultation with appropriate state*
32 *agencies, must find that:*

33
34 *(1) For plant species that the Oregon Department of Agriculture has listed as*
35 *threatened or endangered under ORS 564.105(2), the design, construction and*
36 *operation of the proposed facility, taking into account mitigation:*

37 *(a) Are consistent with the protection and conservation program, if any, that the*
38 *Oregon Department of Agriculture has adopted under ORS 564.105(3); or*

39
40 *(b) If the Oregon Department of Agriculture has not adopted a protection and*
41 *conservation program, are not likely to cause a significant reduction in the*
42 *likelihood of survival or recovery of the species; and*

43

1 (2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as
2 threatened or endangered under ORS 496.172(2), the design, construction and
3 operation of the proposed facility, taking into account mitigation, are not likely to
4 cause a significant reduction in the likelihood of survival or recovery of the species.

5
6 **Findings of Fact**
7

8 The Threatened and Endangered Species Standard requires the Council to find that the
9 design, construction, and operation of the facility are consistent with plant protection and
10 conservation programs adopted by the Oregon Department of Agriculture under ORS
11 564.105(2). If the Department of Agriculture has not adopted a protection and conservation
12 program, the Council must find that the facility is not likely to cause a significant reduction in
13 the likelihood of survival or recovery of the species. With respect to wildlife species, the
14 Council must find that the design, construction and operation of the facility, taking into
15 account mitigation, are not likely to cause a significant reduction in the likelihood of survival
16 or recovery of species listed as threatened or endangered by Oregon Fish and Wildlife
17 Commission under ORS 469.172(2).
18

19 In the *Final Order on the Application*, the Council made findings regarding threatened or
20 endangered plant and wildlife species within the LJI A analysis area.⁴³ The Council found that
21 no conservation program applied, and that the design, construction and operation of the
22 proposed facility, taking into account mitigation and subject to the site certificate conditions,
23 did not have the potential to significantly reduce the likelihood of the survival or recovery of
24 any threatened or endangered plant or wildlife species listed under Oregon law.⁴⁴ Those
25 findings are incorporated by this reference. To ensure compliance, the Council adopted
26 Conditions 84, 85, 87 and 88 into the site certificate. Based upon its findings, the Council
27 found that the facility complied with the Threatened and Endangered Species Standard.⁴⁵
28

29 In the *Final Order on Amendment 1*, the Council found that the design, construction and
30 operation of the proposed LJIB components, subject to the site certificate conditions, were
31 not likely to cause a significant reduction in the likelihood of survival or recovery of any
32 State-listed threatened or endangered plant species.⁴⁶ The Council found that the facility,
33 including the LJIB components, was unlikely to cause a significant reduction in the likelihood
34 of survival or recovery of the Washington Ground Squirrel, or have any significant adverse
35 impact on bald eagles. The Council's previous findings are incorporated by this reference.
36 Based upon its findings, the Council concluded that the facility would comply with the
37 Council's Threatened and Endangered Species Standard.⁴⁷
38

⁴³ *Final Order on the Application* at 74-79.

⁴⁴ *Final Order on the Application* at 80.

⁴⁵ *Id.* at 80.

⁴⁶ *Final Order on Amendment 1* at 62.

⁴⁷ *Id.* at 63.

1 The proposed amendment would divide the facility into two separate facilities. LJIA and
2 LJIB are operational and the proposed amendment does not seek to change the site
3 boundary or any physical components of the facility. The proposed amendment does not
4 affect the Council's previous findings, nor does the proposed amendment affect the facts
5 relied upon by the Council to reach such conclusions.

6
7 The Council applies the conditions regarding Threatened and Endangered Species to LJIA
8 and LJIB and modifies the conditions as appropriate to each of the proposed facilities as
9 shown in Attachment E.

10
11 **Conclusion**

12
13 The Council finds that LJIA and LJIB, as amended, comply with the Council's Threatened and
14 Endangered Species Standard.

15
16 **III.A.11. Scenic Resources: OAR 345-022-0080**

17
18 *(1) Except for facilities described in section (2), to issue a site certificate, the Council*
19 *must find that the design, construction and operation of the facility, taking into*
20 *account mitigation, are not likely to result in significant adverse impact to scenic*
21 *resources and values identified as significant or important in local land use plans,*
22 *tribal land management plans and federal land management plans for any lands*
23 *located within the analysis area described in the project order.*

24
25 **Findings of Fact**

26
27 The Scenic Resources Standard requires the Council to find that the design, construction,
28 and operation of the facility are not likely to result in adverse impacts to scenic resources.

29
30 In the *Final Order on the Application*, the Council found that the design, construction and
31 operation of the facility were not likely to result in a significant adverse impact to scenic and
32 aesthetic values identified as significant or important in applicable federal land management
33 plans or in local land use plans in the analysis area.⁴⁸ In making these findings, the Council
34 addressed an analysis area that included the area within the LJIA site boundary and 30 miles
35 from the site boundary. The Council's previous findings are incorporated by this reference.
36 In the *Final Order on Amendment 1*, the Council noted that the proposed amendment would
37 change the site boundary and authorize construction of wind turbines and other visible
38 structures in the LJIB area. The Council determined that the analysis area for the purposes
39 of the amendment request was the area within the site boundary and 10 miles from the site
40 boundary, in conformance with OAR 345-001-0010. The Council found that the design,
41 construction and operation of the facility, including the proposed LJIB components, would
42 not result in significant adverse impact to scenic resources and values identified as

⁴⁸ *Final Order on the Application* at 64.

1 significant or important in local land use plans, tribal land management plans and federal
2 land management plans for any lands located within the analysis area.⁴⁹ The Council's
3 previous findings are incorporated by this reference.

4
5 The proposed amendment seeks to divide the facility into two separate facilities. LJIA and
6 LJIB are both in operation, and the proposed amendment would not substantially change
7 the facts upon which the Council relied in its previous conclusion regarding impacts on
8 identified scenic resources or values. Approval of the amendment seeks no change that
9 would alter the basis for the Council's earlier findings. The total number of wind turbines
10 and the authorized maximum blade tip height of wind turbines would not change.

11
12 The Council finds that the continued operation of the LJIA and LJIB facilities are not likely to
13 result in significant adverse impacts to scenic and aesthetic values identified as significant or
14 important in applicable management plans or in local land use plans in the analysis area.

15 16 Conclusion

17
18 For the reasons discussed above, the Council concludes that the LJIA and LJIB facilities, as
19 amended, comply with the Council's Scenic Resources Standard.

20 21 III.A.12. Historic, Cultural and Archaeological Resources: OAR 345-022-0090

22
23 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
24 *Council must find that the construction and operation of the facility, taking into*
25 *account mitigation, are not likely to result in significant adverse impacts to:*

26
27 *(a) Historic, cultural or archaeological resources that have been listed on, or*
28 *would likely be listed on the National Register of Historic Places;*

29
30 *(b) For a facility on private land, archaeological objects, as defined in ORS*
31 *358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and*

32
33 *(c) For a facility on public land, archaeological sites, as defined in ORS*
34 *358.905(1)(c).*

35 36 Findings of Fact

37
38 This standard requires the Council to evaluate whether the facility would have significant
39 adverse impacts to historic, cultural, or archaeological resources. The Council may issue a
40 site certificate for a wind facility without making findings under this standard, but may rely
41 on this standard as necessary to impose site certificate conditions.

42

⁴⁹ Final Order on Amendment 1at 53.

1 In the *Final Order on the Application*, the Council reviewed cultural resource reports on the
2 areas where the LIIA components would be located, and adopted Conditions 45, 46, 47 and
3 48 to safeguard cultural resources.⁵⁰

4
5 In the *Final Order on Amendment 1*, the Council applied the above referenced conditions to
6 LIIIB, subject to slight modification. In addition, the Council adopted Condition 102 to
7 require pre-construction cultural resource surveys in any area that was not previously
8 surveyed in the LIIIB area, and Condition 103 to ensure avoidance of any intact physical
9 evidence of the Oregon Trail that is discovered during construction.⁵¹

10
11 Amendment 2 seeks to divide the facility into two separate facilities within the approved site
12 boundary, and would not result in placement of facility components within areas that were
13 not previously addressed by the Council. The requested amendment seeks no change that
14 would affect the Council's previous findings.

15
16 **Conclusion**

17
18 The Council concludes that LIIA and LIIIB, as amended, comply with the Council's Historic,
19 Cultural and Archaeological Resources Standard.

20
21 **III.A.13. Recreation: OAR 345-022-0100**

22
23 *(1) Except for facilities described in section (2), to issue a site certificate, the Council*
24 *must find that the design, construction and operation of a facility, taking into account*
25 *mitigation, are not likely to result in a significant adverse impact to important*
26 *recreational opportunities in the analysis area as described in the project order. The*
27 *Council shall consider the following factors in judging the importance of a*
28 *recreational opportunity:*

29
30 *(a) Any special designation or management of the location;*

31
32 *(b) The degree of demand;*

33
34 *(c) Outstanding or unusual qualities;*

35
36 *(d) Availability or rareness;*

37
38 *(e) Irreplaceability or irretrievability of the opportunity.*

39
40
41

⁵⁰ *Final Order on the Application* at 105-106.

⁵¹ *Final Order on Amendment 1* at 77.

1 **Findings of Fact**

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42

The Recreation Standard requires the Council to find that the design, construction, and operation of the facility are not likely to result in adverse impacts to important recreational opportunities.

In the *Final Order on the Application*, the Council found that the design, construction and operation of the facility, taking mitigation site certificate conditions into account, were not likely to result in significant adverse impacts to recreational opportunities in the analysis area.⁵²

In the *Final Order on Amendment 1*, the Council noted that the proposed amendment would change the site boundary of the facility and authorize the construction of the LJIB components. However, the Council found that the design, construction and operation of the facility, including the LJIB components, were not likely to result in significant adverse impacts to recreation opportunities in the analysis area.⁵³ The Council’s previous findings are incorporated by this reference.

Amendment 2, as proposed, would not affect the Council’s previous findings. The division of the facility into two separate facilities would not affect any recreational opportunities that were not previously addressed by the Council. The amendment does not expand the site boundary or alter the potential impacts of the facility. Approval of Amendment 2 would not change the facts or circumstances upon which the Council relied in making findings regarding impacts on recreational opportunities.

Conclusion

The Council finds that LJIA and LJIB, as amended, comply with the Council’s Recreation Standard.

III.A.14. Public Services: OAR 345-022-0110

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.

⁵² *Final Order on the Application* at 65.
⁵³ *Final Order on Amendment 1* at 54.

1 **Findings of Fact**

2
3 The Public Services Standard requires the Council to find that the construction and operation
4 of the facility are not likely to result in significant adverse impacts to the ability of public and
5 private providers to provide the services listed in the standard above.

6
7 In the *Final Order on the Application*, the Council addressed the potential impacts of
8 construction and operation of the facility on the ability of public and private providers within
9 the analysis area to provide public services.⁵⁴ The analysis area that was addressed by the
10 Council in the *Final Order on the Application* addressed communities within 30 miles of the
11 LJIA site boundary. The Council's previous findings are incorporated by this reference. The
12 Council adopted Conditions 36, 37, 38 and 96, addressing impacts to public services.

13
14 In May 2007, the Council revised OAR 345-001-0010(57) and reduced the analysis area for
15 impacts to public services to address communities within 10 miles from the site boundary.
16 Accordingly, Amendment 1 did not increase the analysis area for public services even though
17 it enlarged the area within the site boundary. In the *Final Order on Amendment 1*, the
18 Council found that there would be no significant changes to the impacts of the facility on
19 sewers, sewage treatment during construction or operation. Further, the Council found that
20 Amendment 1 would not present significantly different effects on housing, police and fire
21 protection, health care or school compared to the anticipated effects discussed in the *Final*
22 *Order on the Application*, nor would the request significantly increase traffic volumes.

23
24 Amendment 2, as proposed, would not affect the Council's previous findings. The division of
25 the facility into two separate facilities would not change the analysis of affected public
26 services. LJIA and LJIB are operational, and the requested amendment seeks no change that
27 would affect the Council's previous findings.

28
29 **Conclusion**

30
31 Based upon the findings above, the Council concludes that LJIA and LJIB, as amended,
32 comply with the Council's Public Services Standard.

33
34 **III.A.15. Waste Minimization: OAR 345-022-0120**

35
36 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
37 *Council must find that, to the extent reasonably practicable:*

38
39 *(a) The applicant's solid waste and wastewater plans are likely to minimize*
40 *generation of solid waste and wastewater in the construction and operation of*
41 *the facility, and when solid waste or wastewater is generated, to result in*
42 *recycling and reuse of such wastes;*

⁵⁴ *Final Order on the Application* at 106-109.

1 (b) *The applicant's plans to manage the accumulation, storage, disposal and*
2 *transportation of waste generated by the construction and operation of the*
3 *facility are likely to result in minimal adverse impact on surrounding and adjacent*
4 *areas.*

5
6 **Findings of Fact**

7
8 The Waste Minimization Standard requires the Council to find that the certificate holder will
9 minimize generation of solid waste and wastewater, and manage waste generated to result
10 in minimal adverse impacts on the surrounding and adjacent areas.

11
12 In the *Final Order on the Application*, the Council made findings and adopted site certificate
13 conditions regarding management of solid waste and wastewater likely to be generated
14 during the construction and operation of the LIF.⁵⁵ The Council's previous findings are
15 incorporated by this reference. The Council adopted Conditions 68, 69, 73, 77, 96, 98, 99 and
16 100 to address waste management concerns.

17
18 In the *Final Order on Amendment 1*, the Council concluded that solid waste and wastewater
19 generated by construction and operation of the facility including the LJIB components were
20 likely to be similar to that generated by construction of the LJIA components alone because
21 the amendment did not increase the number of turbines authorized for construction for the
22 facility as a whole. The Council found that no changes to the site certificate conditions
23 related to the Waste Minimization Standard were necessary.⁵⁶

24
25 Amendment 2 would divide the facility into two separate facilities. LJIA and LJIB are
26 operational and the proposed amendment would not affect the Council's previous findings.
27 The amendment would not change the Council's analysis regarding waste minimization.

28
29 **Conclusion**

30
31 The Council finds that LJIA and LJIB, as amended, comply with the Council's Waste
32 Minimization Standard.

33
34 **III.A.16. Division 23 Standards**

35
36 The Division 23 standards apply only to "nongenerating facilities" as defined in ORS
37 469.503(2)(e)(K), except non-generating facilities that are related or supporting facilities. The
38 facility is not a nongenerating facility as defined in statute and therefore Division 23 is
39 inapplicable to the requested amendment.

40
41

⁵⁵ *Final Order on the Application* at 109-112.

⁵⁶ *Final Order on Amendment 1* at 79.

1 III.A.17. Division 24 Standards

2
3 The Council's Division 24 standards include specific standards for siting facilities including
4 wind, underground gas storage reservoirs, transmission lines and facilities that emit carbon
5 dioxide.

6
7 Public Health and Safety Standards for Wind Energy Facilities: OAR 345-024-0010
8 *To issue a site certificate for a proposed wind energy facility, the Council must find*
9 *that the applicant:*

10
11 *(1) Can design, construct and operate the facility to exclude members of the public*
12 *from close proximity to the turbine blades and electrical equipment.*

13 *(2) Can design, construct and operate the facility to preclude structural failure of the*
14 *tower or blades that could endanger the public safety and to have adequate safety*
15 *devices and testing procedures designed to warn of impending failure and to*
16 *minimize the consequences of such failure.*

17
18 Findings of Fact

19
20 In the *Final Order on the Application*, the Council found that the certificate holder could
21 design, construct and operate the facility to exclude members of the public from close
22 proximity to the turbine blades and electrical equipment, to preclude structural failure of the
23 tower or blades that could endanger the public safety and to have adequate safety devices
24 and testing procedures.⁵⁷ Those findings are incorporated by this reference. To ensure public
25 safety, the Council included Conditions 12, 27, 39, 50, 51, 53, 54, 55, 56, 57, 58 and 59 in the
26 site certificate.

27
28 In the *Final Order on Amendment 1*, the Council concluded that similar public safety
29 conditions would apply to the LJIB components with some minor modification.⁵⁸ The Council
30 found that the facility, as amended would comply with the Council's public health and safety
31 standards for wind energy facilities.

32
33 Amendment 2, seeking to divide the facility into two separate facilities, would not change
34 the facts or circumstances upon which the Council relied in making findings regarding public
35 health and safety at the facility. LJIA and LJIB are operational, and because the proposed
36 LJIA and LJIB facilities would be located within the approved facility site boundary, the
37 division of the facility into two separate facilities would not result in any new or increased

⁵⁷ *Final Order on the Application* at 66.

⁵⁸ The Council modified Condition 39 to conform to setback distances that the Council required for other wind energy facilities. Additionally, the Council modified Condition 53 to require the submission of Notices of Proposed Construction or Alteration to the Oregon Department of Aviation, as required under OAR 738-070-0080.

1 risk of harm to public safety. The proposed amendment does not affect the Council's
2 previous findings.

3
4 **Conclusion**

5
6 For the reasons discussed, the Council concludes that, as amended, LJIIA and LJIB comply
7 with the Council's Public Health and Safety Standards for Wind Energy Facilities.

8
9 **Siting Standards for Wind Energy Facilities: OAR 345-024-0015**

10 *To issue a site certificate for a proposed wind energy facility, the Council must find*
11 *that the applicant can design and construct the facility to reduce cumulative*
12 *adverse environmental effects in the vicinity by practicable measures including,*
13 *but not limited to, the following:*

14
15 *(1) Using existing roads to provide access to the facility site, or if new roads are*
16 *needed, minimizing the amount of land used for new roads and locating them to*
17 *reduce adverse environmental impacts.*

18
19 *(2) Using underground transmission lines and combining transmission routes.*

20
21 *(3) Connecting the facility to existing substations, or if new substations are needed,*
22 *minimizing the number of new substations.*

23
24 *(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable*
25 *wildlife in areas near turbines or electrical equipment.*

26
27 *(5) Designing the components of the facility to minimize adverse visual features.*

28
29 *(6) Using the minimum lighting necessary for safety and security purposes and using*
30 *techniques to prevent casting glare from the site, except as otherwise required by the*
31 *Federal Aviation Administration or the Oregon Department of Aviation*

32
33 **Findings of Fact**

34
35 In the *Final Order on the Application*, the Council found that the certificate holder could
36 design and construct the facility to reduce visual impact, to restrict public access and to
37 reduce cumulative adverse environmental impacts in the vicinity to the extent practicable in
38 accordance with the requirements of OAR 345-024-0015.⁵⁹ Those findings are incorporated
39 by this reference.

⁵⁹ *Final Order on the Application* at 79-85.

1 In the *Final Order on Amendment 1*, the Council concluded that the amendment would
2 reduce the number of turbines authorized for construction from 133 to 127, but enlarge the
3 facility site from approximately 6,404 acres to 14,366 acres. However, the Council concluded
4 that subject to the site certificate conditions, the facility, including LJIB components, would
5 comply with the Council's Siting Standards for Wind Energy Facilities.⁶⁰

6
7 Approval of Amendment 2 would authorize the division of the facility into two separate
8 facilities, and would not affect the Council's previous findings. LJIA and LJIB are operational,
9 and approval of the amendment would not substantially change the cumulative effects of
10 the components authorized for construction within the previously-approved site boundary.

11
12 **Conclusion**

13
14 The Council concludes that LJIA and LJIB, as amended, comply with the Council's Siting
15 Standards for Wind Energy Facilities.

16
17 **Siting Standards for Transmission Lines: OAR 345-0240-0090**

18 *To issue a site certificate for a facility that includes any transmission line under*
19 *Council jurisdiction, the Council must find that the applicant:*

20
21 *(1) Can design, construct and operate the proposed transmission line so that*
22 *alternating current electric fields do not exceed 9 kV per meter at one meter above*
23 *the ground surface in areas accessible to the public;*

24
25 *(2) Can design, construct and operate the proposed transmission line so that induced*
26 *currents resulting from the transmission line and related or supporting facilities will*
27 *be as low as reasonably achievable.*

28
29 **Findings of Fact**

30
31 In the *Final Order on the Application*, the Council found that the certificate holder could
32 design and construct the facility transmission lines so that electric fields would not exceed 9
33 kV per meter at one meter above ground surface in areas accessible to the public.⁶¹ The
34 Council found that the certificate holder could design, construct and operate the proposed
35 transmission lines so that induced currents resulting from the transmission lines and related
36 or supporting facilities would be as low as reasonably achievable. Further, the Council
37 included Condition 17, which requires the certificate holder to design, construct and operate
38 all facility transmission lines in accordance with the requirements of the National Electrical
39 Safety Code, and Condition 80, which requires the certificate holder to design and maintain

⁶⁰ *Final Order on Amendment 1* at 59.

⁶¹ *Final Order on the Application* at 73.

1 facility transmission lines so that electric fields during operation do not exceed 9 kV per
2 meter at one meter above the ground surface in areas accessible to the public and so that
3 induced voltages during operation are as low as reasonably achievable.

4
5 In the *Final Order on Amendment 1*, the Council concluded that the certificate holder could
6 design and construct the collector lines for LJIB according to the same specifications
7 discussed in the *Final Order* for the LJIA collector lines.⁶² Further, the Council found that the
8 previous findings regarding LJIA collector line compliance with the electric field standard
9 applied the LJIB collector lines as well.⁶³ The Council's previous findings are incorporated by
10 this reference. The Council found that the facility complied with the Council's Siting
11 Standards for Transmission Lines.

12
13 Amendment 2 seeks to divide the facility into two separate facilities, but does not request
14 any change to the previously approved site or facility components. Amendment 2 would not
15 change the facts or circumstances upon which the Council relied in making findings
16 regarding compliance with the standards in OAR 345-024-0090.

17 18 **Conclusion**

19
20 The Council concludes that LJIA and LJIB, as amended, comply with the Council's Siting
21 Standards for Transmission Lines.

22 23 **III.B. OTHER APPLICABLE REGULATORY REQUIREMENTS UNDER COUNCIL JURISDICTION**

24
25 Under ORS 469.503(3) and under the Council's General Standard of Review (OAR 345-022-
26 0000), the Council must determine whether the proposed facility complies with "all other
27 Oregon statutes and administrative rules... as applicable to the issuance of a site certificate
28 for the proposed facility." In evaluating this amendment, the Council must determine
29 whether the proposed amendment affects any finding made by the Council in earlier
30 orders.⁶⁴ This section addresses the applicable Oregon statutes and administrative rules that
31 are not otherwise addressed, including noise control regulations, regulations for removal or
32 fill of material affecting waters of the state, regulations for appropriating ground water, and
33 the Council's statutory authority to consider protection of public health and safety.

34 35 **Noise Control Regulations: OAR 340-035-0035**

36 (1) *Standards and Regulations:*

37 ***

38
39 (b) *New Noise Sources:*

⁶² *Final Order on the Application* at 73.

⁶³ *Final Order on Amendment 1* at 59.

⁶⁴ OAR 345-027-0070(10)(c)

1 ****

2 (B) *New Sources Located on Previously Unused Site:*

3
4 (i) *No person owning or controlling a new industrial or commercial noise*
5 *source located on a previously unused industrial or commercial site shall*
6 *cause or permit the operation of that noise source if the noise levels*
7 *generated or indirectly caused by that noise source increase the ambient*
8 *statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or*
9 *exceed the levels specified in Table 8, as measured at an appropriate*
10 *measurement point, as specified in subsection (3)(b) of this rule, except as*
11 *specified in subparagraph (1)(b)(B)(iii).*

12
13 (ii) *The ambient statistical noise level of a new industrial or commercial*
14 *noise source on a previously unused industrial or commercial site shall*
15 *include all noises generated or indirectly caused by or attributable to that*
16 *source including all of its related activities. Sources exempted from the*
17 *requirements of section (1) of this rule, which are identified in subsections*
18 *(5)(b) – (f), (j), and (k) of this rule, shall not be excluded from this ambient*
19 *measurement.*

20
21 (iii) *For noise levels generated or caused by a wind energy facility:*

22
23 (I) *The increase in ambient statistical noise levels is based on an assumed*
24 *background L50 ambient noise level of 26 dBA or the actual ambient*
25 *background level. The person owning the wind energy facility may conduct*
26 *measurements to determine the actual ambient L10 and L50 background*
27 *level.*

28
29 (II) *The “actual ambient background level” is the measured noise level at*
30 *the appropriate measurement point as specified in subsection (3)(b) of this*
31 *rule using generally accepted noise engineering measurement practices.*
32 *Background noise measurements shall be obtained at the appropriate*
33 *measurement point, synchronized with windspeed measurements of hub*
34 *height conditions at the nearest wind turbine location. “Actual ambient*
35 *background level” does not include noise generated or caused by the wind*
36 *energy facility.*

37
38 (III) *The noise levels from a wind energy facility may increase the ambient*
39 *statistical noise levels L10 and L50 by more than 10 dBA (but not above the*
40 *limits specified in Table 8), if the person who owns the noise sensitive*
41 *property executes a legally effective easement or real covenant that*

1 benefits the property on which the wind energy facility is located. The
2 easement or covenant must authorize the wind energy facility to increase
3 the ambient statistical noise levels, L10 or L50 on the sensitive property by
4 more than 10 dBA at the appropriate measurement point.
5

6 (IV) For purposes of determining whether a proposed wind energy facility
7 would satisfy the ambient noise standard where a landowner has not
8 waived the standard, noise levels at the appropriate measurement point
9 are predicted assuming that all of the proposed wind facility's turbines are
10 operating between cut-in speed and the wind speed corresponding to the
11 maximum sound power level established by IEC 61400-11 (version 2002-
12 12). These predictions must be compared to the highest of either the
13 assumed ambient noise level of 26 dBA or to the actual ambient
14 background L10 and L50 noise level, if measured. The facility complies with
15 the noise ambient background standard if this comparison shows that the
16 increase in noise is not more than 10 dBA over this entire range of wind
17 speeds.
18

19 (V) For purposes of determining whether an operating wind energy facility
20 complies with the ambient noise standard where a landowner has not
21 waived the standard, noise levels at the appropriate measurement point
22 are measured when the facility's nearest wind turbine is operating over
23 the entire range of wind speeds between cut-in speed and the windspeed
24 corresponding to the maximum sound power level and no turbine that
25 could contribute to the noise level is disabled. The facility complies with
26 the noise ambient background standard if the increase in noise over either
27 the assumed ambient noise level of 26 dBA or to the actual ambient
28 background L10 and L50 noise level, if measured, is not more than 10 dBA
29 over this entire range of wind speeds.
30

31 (VI) For purposes of determining whether a proposed wind energy facility
32 would satisfy the Table 8 standards, noise levels at the appropriate
33 measurement point are predicted by using the turbine's maximum sound
34 power level following procedures established by IEC 61400-11 (version
35 2002-12), and assuming that all of the proposed wind facility's turbines
36 are operating at the maximum sound power level.
37

38 (VII) For purposes of determining whether an operating wind energy
39 facility satisfies the Table 8 standards, noise generated by the energy
40 facility is measured at the appropriate measurement point when the
41 facility's nearest wind turbine is operating at the windspeed corresponding

1 to the maximum sound power level and no turbine that could contribute to
2 the noise level is disabled.

3 * * * * *

4
5 **Findings of Fact**

6
7 The noise control regulations provided by OAR 340-035-0035 apply to noise associated with
8 operation of the facility.

9
10 In the *Final Order on the Application*, the Council concluded that the LJF would comply with
11 the applicable noise control regulations.⁶⁵

12
13 In the *Final Order on the Amendment 1*, the Council noted that the amendment would
14 change the site boundary of the facility and authorize the construction of wind turbines and
15 related components in the LJIB area, but would not change the maximum number of
16 turbines, the maximum generating capacity or the range of turbine types or sizes previously
17 authorized under the site certificate. The Council concluded that subject to the site
18 certificate conditions, the facility would comply with the noise control regulations in OAR
19 340-035-0035.⁶⁶

20
21 Amendment 2 would divide the facility into two separate facilities within the approved site
22 boundary. LJIA and LJIB are operational, and the amendment does not propose to increase
23 the combined maximum number of turbines. The amendment does not propose any change
24 that would affect the Council's previous findings.

25
26 **Conclusion**

27
28 For the reasons discussed above and subject to the conditions in each site certificate, the
29 Council finds that, as amended, LJIA and LJIB comply with the applicable noise control
30 regulations.

31
32 **Removal-Fill Law**

33
34 The Oregon Removal-Fill Law (ORS 196.800 through .990) and DSL regulations (OAR 141-085-
35 0005 through 141-085-0090) require a Removal/Fill Permit if 50 cubic yards or more of

⁶⁵ *Final Order on the Application* at 112-117.

⁶⁶ *Final Order on Amendment 1* at 86. Condition 2 requires the certificate holder to operate the facility in accordance with all applicable state laws and administrative rules; Condition 94 requires a noise analysis applicable to any phase of the facility be performed before beginning construction of that phase; Condition 93 requires the certificate holder to confine the noisiest construction activities to the daylight hours and to establish a noise compliant response system to address any noise complaints during construction; Condition 95 requires the certificate holder to maintain a noise complaint response system during facility operation and to notify the Department of any complaints received about noise from the facility as well as the actions taken to address them

1 material is removed, filled or altered within any “waters of the state” at the proposed site.⁶⁷
2 The U.S. Army Corps of Engineers administers Section 404 of the Clean Water Act, which
3 regulates the discharge of fill into waters of the United States, and determines whether a
4 Nationwide or Individual Section 404 fill permit is required.

5

6 **Findings of Fact**

7

8 In the *Final Order on the Application*, the Council found that a removal/fill permit would be
9 needed for construction of the facility and approved the issuance of the permit, subject to
10 the requirements of Condition 72.⁶⁸

11

12 In the *Final Order on Amendment 1*, the Council found that a new or amended removal/fill
13 permit would not be required for construction of the LJIB components.⁶⁹

14

15 Amendment 2 would divide the facility into two separate facilities within the approved site
16 boundary of the facility and would not affect the Council’s previous findings. LJIA and LJIB
17 are in operation, and the proposed amendment would not affect any areas that were not
18 previously addressed by the delineation report on the wetlands and waters within the
19 facility analysis area. The amendment would not affect any “waters of the state.”

20

21 **Conclusion**

22

23 The Council concludes that no removal/fill permit is required.

24

25 **Ground Water Act**

26

27 Through the provisions of the Ground Water Act of 1955, ORS 537.505 to ORS 537.796, and
28 OAR Chapter 690, the Oregon Water Resources Commission administers the rights of
29 appropriation and use of the ground water resources of the state.

30

31 **Findings of Fact**

32

33 In the *Final Order on the Application*, the Council found the total amount of water that
34 would be needed for the facility construction could be obtained from the City of Arlington.
35 This finding demonstrated that sufficient water was available from a source for which there
36 is an existing water right under which construction water could be provided to the facility.⁷⁰

⁶⁷ OAR 141-085-0010(225) defines “Waters of this State.” The term includes wetlands and certain other water bodies.

⁶⁸ Under Condition 72, the certificate holder is required to conduct a pre-construction field investigation based on the final design layout of the facility if construction would occur in any locations not previously investigated. The condition requires that there be no impact on any jurisdictional water identified in the pre-construction investigation.

⁶⁹ *Final Order on Amendment 1* at 87.

⁷⁰ *Final Order on the Application* at 127.

1 The Council found that, during operation, water would be used at the O&M buildings
2 primarily for incidental uses and, if necessary, for turbine blade washing. Water for
3 operation uses would be supplied from one or more on-site wells and would not exceed
4 5,000 gallons per day, consistent with Condition 76.

5
6 In the *Final Order on Amendment 1*, the Council found that the expansion of the facility to
7 include LJIB would not increase the maximum amount of water expected to be used during
8 construction and operation of the facility. The Council concluded that the facility complied
9 with applicable regulations pertaining to appropriation and use of water resources.⁷¹

10
11 Amendment 2 seeks to divide the facility into two separate facilities. LJIA and LJIB are
12 operational, and the amendment would not affect the Council's previous findings. The
13 amendment request does not seek changes to the site boundary or physical components of
14 the facility. The amendment request would not alter the basis for the Council's earlier
15 findings.

16 17 **Conclusion**

18
19 The Council concludes that LJIA and LJIB, as amended, comply with the applicable
20 regulations pertaining to water rights.

21 22 **State Highway Access and Crossings**

23
24 Under OAR Chapter 734, Division 55, the Oregon Department of Transportation regulates
25 the location, installation, construction, maintenance and use of utility structures, including
26 buried cables, within State Highway right-of-way. Under Division 51, ODOT regulates
27 highway approaches and access control.

28 29 **Findings of Fact**

30
31 In the *Final Order on Amendment 1*, the Council found that ODOT permits for utility crossings
32 and State Highway approaches would be needed for the LJIB components. The Council
33 adopted Condition 104 in the site certificate to address these requirements.

34
35 The amendment request seeks to divide the facility into two separate facilities. The
36 amendment would not affect the Council's previous findings.

37 38 **Conclusion**

39
40 The Council finds that LJIA and LJIB, as amended, comply with requirements for State
41 Highway access and crossings.

42

⁷¹ *Final Order on the Amendment 1* at 88.

1 **Public Health and Safety**

2
3 Under ORS 469.310, the Council is charged with ensuring that the “siting, construction and
4 operation of energy facilities shall be accomplished in a manner consistent with protection
5 of the public health and safety....” State law further provides that “the site certificate shall
6 contain conditions for the protection of the public health and safety....” ORS 469.401(2).

7
8 **Findings of Fact**

9
10 The Council’s Public Health and Safety Standards for wind energy facilities are discussed
11 above. This section addresses the issues of fire protection, magnetic fields and coordination
12 with the Oregon Public Utility Commission.

13
14 (1) Fire Protection

15
16 In the *Final Order on the Application*, the Council made findings and adopted conditions
17 regarding fire prevention and response for the LJF.⁷² In the *Final Order on Amendment 1*, the
18 Council concluded that the fire risks for the LJIB area were similar to the risks previously
19 considered by the Council for the LJIA area. Applicable conditions include Conditions 58, 60,
20 61, 62, 63, 64, 65 and 66. The proposed amendment would not affect the Council’s previous
21 findings.

22
23 (2) Magnetic Fields

24
25 Electric transmission lines create both electric and magnetic fields. The electric fields
26 associated with the proposed transmission lines are addressed above at page 32.

27
28 In the *Final Order on the Application*, the Council concluded that there would not be a
29 significant risk to public health and safety from the magnetic field generated by the
30 underground or aboveground 34.5-kV collector system.⁷³ Because the 230-kV
31 interconnection line for LJIA would be entirely within a fenced area and inaccessible to the
32 public (and because the adjacent facility substation and Leaning Juniper I substation would
33 obscure any electromagnetic fields generated by the 230-kV line), the Council found that the
34 magnetic field generated by the interconnection line would not result in any significant risk
35 to public health and safety.⁷⁴

36
37 In the *Final Order on Amendment 1*, the Council concluded that due to the absence of
38 scientific consensus regarding the possible health effects of exposure to magnetic fields,
39 there was no Oregon standard limiting the allowable magnetic field strength associated with
40 transmission lines.⁷⁵ The Council encouraged applicants to practice “prudent avoidance” and

⁷² *Final Order on the Application* at 128-129.

⁷³ *Id.* at 130.

⁷⁴ *Id.*

⁷⁵ A recent discussion of magnetic field effects is included in the *Final Order on the Application for the*

1 to implement low-cost ways to reduce or manage public exposure to magnetic fields from
2 transmission lines under the Council's jurisdiction. Condition 81 addresses prudent
3 avoidance measures to reduce human exposure to magnetic fields. The proposed
4 amendment does not affect the Council's previous findings or conditions.

5
6 (3) Coordination with the PUC

7
8 The Oregon Public Utility Commission Safety and Reliability Section (PUC) has requested that
9 the Council ensure that certificate holders coordinate with PUC staff on the design and
10 specifications of electrical transmission lines and natural gas pipelines. The PUC has
11 explained that others in the past have made inadvertent, but costly, mistakes in the design
12 and specifications of power lines and pipelines that could have easily been corrected early if
13 the developer had consulted with the PUC staff responsible for the safety codes and
14 standards. Condition 79 requires the certificate holder to coordinate the design of electric
15 transmission lines with the PUC. The proposed amendment would not affect the Council's
16 previous findings.

17
18 **Conclusion**

19
20 Based on the findings discussed above and subject to the recommended site certificate
21 conditions discussed herein, the Council concludes that, as amended, LJIA and LJIB comply
22 with requirements to protect public health and safety.

23
24 **III.C. Review of the Transfer Request**

25 PGE submitted the written request to the Department and included all documents necessary
26 pursuant to OAR 345-021-0010(1)(a), (d), (f) and (m).⁷⁶ In addition, PGE certified that it
27 agrees to abide by all the terms and conditions of the site certificate currently in effect and
28 terms and conditions that will result from this amendment request.⁷⁷

29
30 Under OAR 345-027-0100(8), as discussed above, the Council may approve the transfer
31 request if the Council finds that the transferee complies with the Council's Organizational
32 Expertise Standard, the Retirement and Financial Assurance Standard, and if applicable, the
33 Monetary Path Payment Requirement under the Carbon Dioxide Emissions standards.
34 Because the facility is a wind facility, the Monetary Path Payment Requirement is not
35 applicable to this transfer request. The transferee's compliance with the Council's standards
36 is discussed below. When the term "facility" is referenced in this section, it is intended to
37 apply to only LJIB.

38
39

Shepherds Flat Wind Farm (July 25, 2008) at 139-141.

⁷⁶ LJWP and PGE, Request for Amendment 2 to the Site Certificate for the Leaning Juniper Wind Power Facility
(December 28, 2012) Attachment 5-Exhibit (A)(D)(F)(M).

⁷⁷ *Request for Amendment 2-Attachment 6*

1 III.C.1. Organizational Expertise: OAR 345-022-0010

2
3 *(1) To issue a site certificate, the Council must find that the applicant has the*
4 *organizational expertise to construct, operate and retire the proposed facility in*
5 *compliance with Council standards and conditions of the site certificate. To conclude*
6 *that the applicant has this expertise, the Council must find that the applicant has*
7 *demonstrated the ability to design, construct and operate the proposed facility in*
8 *compliance with site certificate conditions and in a manner that protects public health*
9 *and safety and has demonstrated the ability to restore the site to a useful, non-*
10 *hazardous condition. The Council may consider the applicant's experience, the*
11 *applicant's access to technical expertise and the applicant's past performance in*
12 *constructing, operating and retiring other facilities, including, but not limited to, the*
13 *number and severity of regulatory citations issued to the applicant.*

14
15 *(2) The Council may base its findings under section (1) on a rebuttable presumption*
16 *that an applicant has organizational, managerial and technical expertise, if the*
17 *applicant has an ISO 9000 or ISO 14000 certified program and proposes to design,*
18 *construct and operate the facility according to that program.*

19
20 *(3) If the applicant does not itself obtain a state or local government permit or*
21 *approval for which the Council would ordinarily determine compliance but instead*
22 *relies on a permit or approval issued to a third party, the Council, to issue a site*
23 *certificate, must find that the third party has, or has a reasonable likelihood of*
24 *obtaining, the necessary permit or approval, and that the applicant has, or has a*
25 *reasonable likelihood of entering into, a contractual or other arrangement with the*
26 *third party for access to the resource or service secured by that permit or approval.*

27
28 *(4) If the applicant relies on a permit or approval issued to a third party and the third*
29 *party does not have the necessary permit or approval at the time the Council issues*
30 *the site certificate, the Council may issue the site certificate subject to the condition*
31 *that the certificate holder shall not commence construction or operation as*
32 *appropriate until the third party has obtained the necessary permit or approval and*
33 *the applicant has a contract or other arrangement for access to the resource or*
34 *service secured by that permit or approval.*

35
36 **Findings of Fact**

37
38 Subsections (1) and (2) of the Council's Organizational Expertise Standard require that the an
39 applicant, or in this case, the transferee demonstrate the ability to design, construct, and
40 operate the facility in compliance with Council standards and all site certificate conditions, as
41 well as the ability to restore the site to a useful, non-hazardous condition. The Council may
42 consider the applicant's experience and the applicant's past performance in constructing,
43 operating and retiring other facilities. Subsections (3) and (4) address third-party permits,
44 which includes any permits that the certificate holder relies on a contractor or other third
45 party to obtain.

1 PGE has significant experience in constructing and supervising the construction of
2 generation projects. Between 2007 and 2010 PGE completed construction of three phases of
3 the Biglow Canyon Wind Farm, consisting of a total of 217 turbines and located in Sherman
4 County. The Council authorized the Biglow Canyon Wind Farm and, consequently, the
5 Council found PGE to satisfy the Organizational Expertise standard.⁷⁸ In 2007, PGE
6 completed the construction of the 406-megawatt Port Westward combined cycle gas turbine
7 facility in Clatskanie, Oregon. The Council granted PGE the Site Certificate for Port Westward
8 in 2002.⁷⁹ In July 2001, PGE completed the construction of a new 24.9-MW simple cycle gas
9 turbine project located at the Beaver Generation Facility, located in Clatskanie. In 1995, PGE
10 placed into service Coyote Springs Unit 1, a 240-MW combined cycle combustion turbine
11 located in Boardman after receiving Council authorization.⁸⁰ PGE prepared and negotiated
12 all the primary contracts for the design and construction of each of the projects listed above;
13 PGE supervised the construction of each, and performed many of the engineering functions
14 in support of the design and construction work. Based upon the foregoing, it is evident PGE
15 has extensive engineering and project management experience associated with generation
16 projects.

17
18 Further, PGE has not received a penalty or fine for regulatory violations at Biglow Canyon
19 Wind Farm, nor has any regulatory agency levied a penalty or fine against the Coyote Springs
20 Power Plant, Beaver Facility or Port Westward Facility regarding the construction, operation,
21 or maintenance of the facilities.

22
23 Based on the facts above, the Department recommends that the Council find that the
24 transferee has demonstrated the ability to design, construct and operate the proposed
25 facility in compliance with Council standards, all site certificate conditions and in a manner
26 that protects public health and safety.

27
28 With regard to third-party permits, the Council previously determined that LJWP does not
29 require or rely upon any state or local government permit issued to a third party for the
30 construction and operation of the LJIA or LJIB components of the facility.⁸¹ Consequently,
31 PGE will also not require or rely upon any state or local government permit issued to a third
32 party for the construction and operation of the LJIB facility. In addition, LJIB is in operation.

33
34
35

⁷⁸ Final Order and Site Certificate for the Biglow Canyon Wind Farm (June 30, 2006), Final Order on
Amendment #1 and First Amended Site Certificate for the Biglow Canyon Wind Farm, (November. 3, 2006),
Final Order on Amendment#2 and Second Amended Site Certificate for the Biglow Canyon Wind Farm (May
10, 2007), and Final Order on Amendment #3 and Third Amended Site Certificate for the Biglow Canyon Wind
Farm (October 31, 2008).

⁷⁹ Site Certificate for the Port Westward Generating Project (November 2002), as most recently amended on
August 19, 2011 in the Eighth Amended Site Certificate.

⁸⁰ Fourth Amended Site Certificate, incorporating amendments 1 through 9, approved December 2, 2004.

⁸¹ *Final Order on Amendment 1* at 11.

1 **Conclusion**

2
3 For the reasons discussed above, the Council finds that the transferee satisfies the Council's
4 Organizational Expertise standard.

5
6 **III.C.2. Retirement and Financial Assurance: OAR 345-022-0050**

7
8 *To issue a site certificate, the Council must find that:*

9
10 *(1) The site, taking into account mitigation, can be restored adequately to a useful,*
11 *non-hazardous condition following permanent cessation of construction or operation*
12 *of the facility.*

13
14 *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in*
15 *a form and amount satisfactory to the Council to restore the site to a useful, non-*
16 *hazardous condition.*

17
18 **Findings of Fact**

19
20 The Council must find that the site can be restored to a useful, non-hazardous condition
21 following permanent cessation of the facility, and that the transferee has a reasonable
22 likelihood of obtaining a bond or comparable security, satisfactory to the Council, in an
23 amount adequate to restore the site.

24
25 In the *Final Order on the Application* and the *Final Order on Amendment 1*, the Council found
26 that the facility site (including LJIA and LJIB), taking mitigation into account, could be
27 restored adequately to a useful, non-hazardous condition following permanent cessation of
28 construction or operation of the facility.⁸² LJIB is operational and the current bond will
29 remain in place until the Council receives revised bonds LJWP and PGE.

30
31 The transfer request would not affect the Council's previous findings that the facility site,
32 including LJIB, could be restored adequately to a useful non-hazardous condition.

33
34 OAR 345-022-0050(2) requires the Council to decide whether the applicant (transferee) has
35 a reasonable likelihood of obtaining a bond or letter of credit, in a form and amount
36 satisfactory to the Council, to restore the site to a useful, non-hazardous condition. The
37 estimated costs to restore LJIB are included below.

38

⁸² *Final Order on Amendment 1* at 15.

LEANING JUNIPER IIB POST-CONSTRUCTION SUBMITTAL

Site Restoration Cost Estimate (1st Quarter 2011 Dollars)

Compliance with Condition 101 of the Final Order on Amendment #1 to the Site Certificate for Leaning Juniper II

Cost Estimate Component	Quantity	Unit Cost	Extension
Turbines			
Disconnect electrical and ready for disassembly (per tower)	74	\$1,050	\$77,700
Remove turbine blades and hubs (per tower)	74	\$5,594	\$413,956
Remove turbine towers (per net ton of steel)	16,280	\$72.01	\$1,172,323
Remove and load pad transformers (per tower)	74	\$2,417	\$178,858
Foundations and Transformer pad removal (per cubic yard of concrete)	3,478	\$47.34	\$164,649
Met Towers			
Dismantle and dispose of met towers (per tower)	2	\$8,921	\$17,842
Substation and O&M Building			
Dismantle and dispose of collector substation	1	\$84,602	\$84,602
Dismantle and dispose of O&M Facility	1	\$47,156	\$47,156
Transmission Line			
Remove above-ground 34.5-kV collector (per mile)	1.99	\$5,241	\$10,414
Remove 230-kV transmission line (per mile)	6.43	\$22,593	\$145,160
Remove junction boxes (each)	12	\$1,420	\$17,040
Access Roads			
Road removal, grading and seeding (per mile)	14.97	\$21,887	\$327,627
Temporary Areas			
Access roads and met towers (per acre)	74.62	\$6,001	\$447,795
Transmission lines, staging areas, crane paths (per acre)	153	\$2,985	\$457,511
General Costs			
Permits, mobilization, engineering, overhead, utility disconnects (unit cost)	1	\$476,172	\$476,172
Subtotal			\$4,038,803
Subtotal Adjusted to 1st Quarter 2011 Dollars		1.1110	\$4,487,110
Performance Bond		1%	\$44,871
Gross Cost			\$4,531,982
Administration and Project Management		10%	\$453,198
Future Developments Contingency		10%	\$453,198
Total Site Restoration Cost			\$5,438,378
Total Site Restoration Cost (Rounded To Nearest \$1,000)			\$5,438,000

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

On March 11, 2013, PGE provided a letter from Wells Fargo which stated that “based upon PGE’s current credit profile, and subject to the terms of the facility, Wells Fargo, as issuing lender, would be willing to furnish a letter of credit in an amount up to \$5,438,000 for a period not to exceed the maturity of the facility...for the purpose of ensuring the Company’s obligation that the site of the Leaning Juniper IIB Wind Power Facility can be restored to a useful, non-hazardous condition.”⁸³ This letter does not constitute a firm commitment from Wells Fargo to issue the letter of credit, but it is evidence that PGE could obtain the necessary letter of credit for LJIB.

Conclusion

For the reasons discussed above, the Council finds that the facility, including LJIB, can be restored to a useful, non-hazardous condition following permanent cessation of construction. The Council finds that the transferee has demonstrated a reasonable likelihood

⁸³ Letter from Wells Fargo, Aaron Lemke, Assistant Vice President (March 11, 2013). Per Condition 101, the LJIB financial assurance requirement was revised and adjusted to 1st quarter 2011 dollars.

1 of obtaining a bond or letter of credit, satisfactory to the Council, in an amount adequate to
2 restore the LJIB portion of the facility site to a useful, non-hazardous condition. The Council
3 concludes that the transferee would satisfy the Council's Retirement and Financial Assurance
4 standard.

5
6 **Council Determination Regarding Transfer**

7
8 Based on the foregoing, the Council finds that PGE complies with the standards described in
9 OAR 345-022-0010 and OAR 345-022-0050, and pursuant to the terms of the asset purchase
10 agreement, the transferee will be entitled to possession or control of the site should the
11 closing occur. Therefore, the Council approves the transfer.

12
13 However, because closing has yet to occur, the Council will issue the LJIB site certificate to
14 LJWP with a condition of approval requiring the transfer to PGE to occur within 18 months of
15 the effective date of the LJIB site certificate. If the closing does not occur within the 18-
16 month period, then PGE must resubmit the transfer request to the Council for
17 reconsideration as the information previously relied upon in recommending approval of the
18 transfer may no longer be relevant. Additionally, Council includes a condition requiring the
19 transferee to submit a copy of the executed site certificate and documentation of the asset
20 purchase agreement to the Council within 7 days of closing. This ensures prompt notification
21 to the Council of the transfer and ensures all appropriate documentation is secured. The
22 added language is included in Attachment B, Conditions 105-107.

23
24 **III.D. REQUIREMENTS THAT ARE NOT UNDER COUNCIL JURISDICTION**

25
26 **III.D.1 Federally-Delegated Programs**

27
28 Under ORS 469.503(3), the Council does not have jurisdiction for determining compliance
29 with statutes and rules for which the federal government has delegated the decision on
30 compliance to a state agency other than the Council. Nevertheless, the Council may rely on
31 the determinations of compliance and the conditions in federally-delegated permits issued
32 by these state agencies in deciding whether the proposed facility meets other standards and
33 requirements under its jurisdiction.

34
35 As required under Condition 70, the certificate holders would conduct all construction work
36 in compliance with an Erosion and Sediment Control Plan satisfactory to the Oregon
37 Department of Environmental Quality and as required under the federally-delegated
38 National Pollutant Discharge Elimination System Storm Water Discharge General Permit
39 #1200-C.

40
41 **III.D.2 Requirements That Do Not Relate to Siting**

1 Under ORS 469.401(4), the Council does not have authority to preempt the jurisdiction of
2 any state agency or local government over matters that are not included in and governed by
3 the site certificate or amended site certificate. Such matters include design-specific
4 construction or operating standards and practices that do not relate to siting. Nevertheless,
5 the Council may rely on the determinations of compliance and the conditions in the permits
6 issued by state agencies and local governments in deciding whether the facility meets other
7 standards and requirements under its jurisdiction.

8
9 **IV. GENERAL APPLICATION OF CONDITIONS**

10
11 The conditions referenced in this proposed order include conditions that are specifically
12 required by OAR 345-027-0020 (Mandatory Conditions in Site Certificates), OAR 345-027-
13 0023 (Site Specific Conditions), OAR 345-027-0028 (Monitoring Conditions) or OAR Chapter
14 345, Division 26 (Construction and Operation Rules for Facilities). The conditions referenced
15 in this order include conditions based on representations in the request for amendment and
16 the supporting record. The Council deems these representations to be binding commitments
17 made by the certificate holder. This final order also includes conditions that the Council finds
18 necessary to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22
19 and 24, or to protect public health and safety.

20
21 In addition to all other conditions referenced or included in this final order, the site
22 certificate holders are subject to all conditions and requirements contained in the rules of
23 the Council and in local ordinances and state law in effect on the date the amended site
24 certificate is executed. Under ORS 469.401(2), upon a clear showing of a significant threat to
25 the public health, safety or the environment that requires application of later-adopted laws
26 or rules, the Council may require compliance with such later-adopted laws or rules.

27
28 The Council recognizes that many specific tasks related to the design, construction,
29 operation and retirement of the facility will be undertaken by the certificate holders' agents
30 or contractors. Nevertheless, the certificate holders are responsible for ensuring that all
31 agents and contractors comply with all provisions of the site certificate.

32
33 **V. GENERAL CONCLUSION AND PROPOSED ORDER**

34
35 The proposed amendment would divide the current site certificate for the Leaning Juniper II
36 Wind Power Facility into two site certificates for two separate facilities within the previously
37 approved site boundary of the facility (LJIIA and LJIIB, respectively). In addition, the proposed
38 transfer would authorize the transfer of the LJIIB site certificate from Leaning Juniper Wind
39 Power Facility II, LLC to PGE subject to the terms and conditions set forth herein.

40
41 Based on the findings and conclusions included in this order, the Council makes the following
42 findings:
43

1 (1) The proposed Amendment #2 complies with the requirements of the Oregon
2 Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619.

3
4 (2) The proposed Amendment #2 complies with the applicable standards adopted by
5 the Council pursuant to ORS 469.501.

6
7 (3) The proposed Amendment #2 complies with all other Oregon statutes and
8 administrative rules applicable to the amendment of the site certificate for the LJF
9 that are within the Council's jurisdiction.

10
11 (4) The transferee, Portland General Electric, complies with the standards described
12 in OAR 345-022-0010 and OAR 345-022-0050 and, upon completion of a transfer
13 agreement with Leaning Juniper Wind Power Facility II, LLC will be lawfully entitled to
14 possession or control of LJIB as described in the site certificate as amended by this
15 order.


16
17 Accordingly, the Council finds that the facility complies with the General Standard of Review
18 (OAR 345-022-0000). The Council concludes based on a preponderance of the evidence in
19 the record, that the site certificate may be amended as requested by the certificate holder
20 and transferee, subject to the revisions set forth above.

21
22 **FINAL ORDER**

23
24 The Council approves Amendment #2 and issues two new site certificates, subject to the
25 terms and conditions set forth above. In addition, the Council approves the transfer of the
26 LJIB site certificate to PGE subject to the terms and conditions set forth above.

27
28 Issued this 21st day of June, 2013.

Oregon Energy Facility Siting Council

By: 

29 W. Bryan Wolfe, Chair
30 Energy Facility Siting Council

31
32

33 **Notice of the Right to Appeal**

34 *You have the right to appeal this order to the Oregon Supreme Court pursuant to ORS*
35 *469.403. To appeal you must file a petition for judicial review with the Supreme Court within*
36 *60 days from the day this order was served on you. If this order was personally delivered to*
37 *you, the date of service is the date you received this order. If this order was mailed to you,*

- 1 *the date of service is the date it was mailed, not the date you received it. If you do not file a*
- 2 *petition for judicial review within the 60-day time period, you lose your right to appeal.*

Attachment A

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

**Site Certificate
for the
Leaning Juniper IIA Wind Power Facility**

June 21, 2013

The Oregon Energy Facility Siting Council

SITE CERTIFICATE

FOR THE LEANING JUNIPER IIA WIND POWER FACILITY

I. INTRODUCTION

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

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
9 herein by this reference: (a) the Council's *Final Order on the Application* for the facility issued
10 on September 21, 2007, (b) the Council's *Final Order on Amendment #1 for LJF, and (c) the*
11 *Council's Final Order on Amendment #2 for LJF*. In interpreting this site certificate, any
12 ambiguity will be clarified by reference to the following, in order of priority: (1) this
13 ~~Amended-Site Certificate~~, (2) the *Final Order on Amendment #2 for LJF*, (3) the *Final Order*
14 *on Amendment #1 for LJF*, (4) the *Final Order on the Application for LJF*, and (5) the record of
15 the proceedings that led to the Final Orders on the Application, Amendment #1, and
16 Amendment #2 for LJF. [Amendment #2 (LJF)]

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

II. SITE CERTIFICATION

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

- 1 compliance has been delegated by the federal government to a state agency other than
2 the Council. 469.503(3). [Amendment #2 (UF)]
- 3 4. Both the State and the certificate holder shall abide by local ordinances, state law and
4 the rules of the Council in effect on the date this site certificate is executed. ORS
5 469.401(2). In addition, upon a clear showing of a significant threat to public health,
6 safety or the environment that requires application of later-adopted laws or rules, the
7 Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).
- 8 5. For a permit, license or other approval addressed in and governed by this site
9 certificate, the certificate holder shall comply with applicable state and federal laws
10 adopted in the future to the extent that such compliance is required under the
11 respective state agency statutes and rules. ORS 469.401(2).
- 12 6. Subject to the conditions herein, this site certificate binds the State and all counties,
13 cities and political subdivisions in Oregon as to the approval of the site and the
14 construction, operation and retirement of the facility as to matters that are addressed in
15 and governed by this site certificate. ORS 469.401(3).
- 16 7. Each affected state agency, county, city and political subdivision in Oregon with
17 authority to issue a permit, license or other approval addressed in or governed by this
18 site certificate shall, upon submission of the proper application and payment of the
19 proper fees, but without hearings or other proceedings, issue such permit, license or
20 other approval subject only to conditions set forth in this site certificate. ORS
21 469.401(3).
- 22 8. After issuance of this site certificate, each state agency or local government agency that
23 issues a permit, license or other approval for the facility shall continue to exercise
24 enforcement authority over such permit, license or other approval. ORS 469.401(3).
- 25 9. After issuance of this site certificate, the Council shall have continuing authority over
26 the site and may inspect, or direct the Oregon Department of Energy (Department) to
27 inspect, or request another state agency or local government to inspect, the site at any
28 time in order to ensure that the facility is being operated consistently with the terms
29 and conditions of this site certificate. ORS 469.430.

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

30 The energy facility is an operating electric power generating plant with an average
31 electric generating capacity of approximately 30 megawatts and a peak generating capacity
32 of not more than 90.3 ~~277~~ megawatts that produces power from wind energy. The facility
33 consists of not more than 43 ~~127~~ wind turbines. The maximum peak generating capacity of
34 each turbine is not more than 2.1 ~~3.0~~ megawatts. The energy facility is described further in
35 the Final Orders on the Application and Amendment #1 for the UF. [Amendment #2 (UF)]

(b) Related or Supporting Facilities

1 The facility includes the following related or supporting facilities described below and
2 in greater detail in the Final Order on Amendment #2 for LIF:

- 3 • Power collection system
- 4 • Substations and interconnection system
- 5 • Meteorological towers
- 6 • Operations and maintenance facilities
- 7 • Control system
- 8 • Access roads
- 9 • ~~Temporary construction areas~~

10
11 **Power Collection System**

12 A power collection system operating at 34.5 kilovolts (kV) transports power from
13 each turbine to a collector substation. To the extent practicable, the collection system is
14 installed underground at a depth of at least three feet. Not more than 30 percent of the
15 collector system is installed aboveground.

16 **Substations and Interconnection System**

17 The facility includes a substation located near the Bonneville Power Administration
18 (BPA) Jones Canyon Switching Station. An aboveground transmission line ~~less than 100 feet~~
19 ~~in length~~ carries the power from the substation to a BPA switching station and an
20 interconnection with the regional transmission grid through BPA's McNary-Santiam 230-kV
21 transmission line. ~~The facility may include a second substation located within the area added~~
22 ~~to the facility by Amendment #1 (LJIB) and a 230-kV transmission line to carry power from~~
23 ~~the second substation to the facility substation located near the Jones Canyon Switching~~
24 ~~Station. Alternatively, the Facility may include two parallel double circuit 34.5 kV lines to~~
25 ~~carry power from the LJIB area to the facility substation.~~ **[Amendment #2 (LIF)]**

26 **Meteorological Towers**

27 The facility includes ~~two~~ four permanent meteorological (met) towers. The met
28 towers are non-guyed steel towers approximately 80 meters in height. **[Amendment #2**
29 **(LIF)]**

30 **Operations and Maintenance Facilities**

31 The facility includes ~~one or two~~ operations and maintenance (O&M) building with
32 approximately two acres of fenced, graveled parking and storage area ~~adjacent to each~~
33 ~~building.~~ **[Amendment #2 (LIF)]**

34 **Control System**

35 A fiber optic communications network links the wind turbines to a central computer
36 at the O&M buildings. A "supervisory, control and data acquisition" (SCADA) system collects

1 operating and performance data from each wind turbine and from the project as a whole
2 and allows remote operation of the wind turbines.

3 Access Roads

4 The facility includes access roads to provide access to the turbine strings.

5 Temporary Construction Areas

6 ~~During construction, the facility includes temporary laydown areas used to stage
7 construction and store supplies and equipment. Construction crane paths are used to move
8 construction cranes between turbine strings. [Deleted Amendment #2 LUF]~~

2. Location of the Proposed Facility

9 The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in
10 Townships 1-2 and 3 North and Ranges 20 and 21 East. The facility is located on land subject
11 to lease agreements with landowners. [Amendment #2 (LUF)]

IV. CONDITIONS REQUIRED BY COUNCIL RULES

12 This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in
13 Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028
14 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation
15 Rules for Facilities). These conditions should be read together with the specific facility
16 conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter
17 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions,
18 "Office of Energy" means the Oregon Department of Energy, and the other definitions in
19 OAR 345-001-0010 apply.

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

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

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

5 1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate
6 except as provided for in OAR Chapter 345, Division 27.

7 2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site
8 to the Department of Energy within 90 days after beginning operation of the facility. The
9 legal description required by this rule means a description of metes and bounds or a
10 description of the site by reference to a map and geographic data that clearly and
11 specifically identifies the outer boundaries that contain all parts of the facility.

12 3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire
13 the facility:

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

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

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

19 4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of
20 the facility by the dates specified in the site certificate. (*See conditions 25 and 26.*)

21 5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed
22 for wind energy facilities, transmission lines or pipelines under this section, the
23 certificate holder shall not begin construction, as defined in OAR 345-001-0010, or
24 create a clearing on any part of the site until the certificate holder has construction
25 rights on all parts of the site. For the purpose of this rule, "construction rights" means
26 the legal right to engage in construction activities. For wind energy facilities,
27 transmission lines or pipelines, if the certificate holder does not have construction rights
28 on all parts of the site, the certificate holder may nevertheless begin construction, as
29 defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate
30 holder has construction rights on that part of the site and:

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

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

38 6 OAR 345-027-0020(6): If the Council requires mitigation based on an affirmative finding
39 under any standards of Division 22 or Division 24 of this chapter, the certificate holder
40 shall consult with affected state agencies and local governments designated by the

- 1 Council and shall develop specific mitigation plans consistent with Council findings
2 under the relevant standards. The certificate holder must submit the mitigation plans to
3 the Office and receive Office approval before beginning construction or, as appropriate,
4 operation of the facility.
- 5 7 OAR 345-027-0020(7): The certificate holder shall prevent the development of any
6 conditions on the site that would preclude restoration of the site to a useful, non-
7 hazardous condition to the extent that prevention of such site conditions is within the
8 control of the certificate holder.
- 9 8 OAR 345-027-0020(8): Before beginning construction of the facility, the certificate
10 holder shall submit to the State of Oregon, through the Council, a bond or letter of
11 credit in a form and amount satisfactory to the Council to restore the site to a useful,
12 non-hazardous condition. The certificate holder shall maintain a bond or letter of credit
13 in effect at all times until the facility has been retired. The Council may specify different
14 amounts for the bond or letter of credit during construction and during operation of the
15 facility. (*See Condition 30.*)
- 16 9 OAR 345-027-0020(9): The certificate holder shall retire the facility if the certificate
17 holder permanently ceases construction or operation of the facility. The certificate
18 holder shall retire the facility according to a final retirement plan approved by the
19 Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual
20 cost to restore the site to a useful, non-hazardous condition at the time of retirement,
21 notwithstanding the Council's approval in the site certificate of an estimated amount
22 required to restore the site.
- 23 10 OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all
24 representations in the site certificate application and supporting record the Council
25 deems to be binding commitments made by the applicant.
- 26 11 OAR 345-027-0020(11): Upon completion of construction, the certificate holder shall
27 restore vegetation to the extent practicable and shall landscape all areas disturbed by
28 construction in a manner compatible with the surroundings and proposed use. Upon
29 completion of construction, the certificate holder shall remove all temporary structures
30 not required for facility operation and dispose of all timber, brush, refuse and
31 flammable or combustible material resulting from clearing of land and construction of
32 the facility.
- 33 12 OAR 345-027-0020(12): The certificate holder shall design, engineer and construct the
34 facility to avoid dangers to human safety presented by seismic hazards affecting the site
35 that are expected to result from all maximum probable seismic events. As used in this
36 rule "seismic hazard" includes ground shaking, landslide, liquefaction, lateral spreading,
37 tsunami inundation, fault displacement and subsidence.
- 38 13 OAR 345-027-0020(13): The certificate holder shall notify the Department, the State
39 Building Codes Division and the Department of Geology and Mineral Industries promptly
40 if site investigations or trenching reveal that conditions in the foundation rocks differ

1 significantly from those described in the application for a site certificate. After the
2 Department receives the notice, the Council may require the certificate holder to
3 consult with the Department of Geology and Mineral Industries and the Building Codes
4 Division and to propose mitigation actions.

5 14 OAR 345-027-0020(14): The certificate holder shall notify the Department, the State
6 Building Codes Division and the Department of Geology and Mineral Industries promptly
7 if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the
8 vicinity of the site.

9 15 OAR 345-027-0020(15): Before any transfer of ownership of the facility or ownership of
10 the site certificate holder, the certificate holder shall inform the Department of the
11 proposed new owners. The requirements of OAR 345-027-0100 apply to any transfer of
12 ownership that requires a transfer of the site certificate

13 16 OAR 345-027-0020(16): If the Council finds that the certificate holder has permanently
14 ceased construction or operation of the facility without retiring the facility according to
15 a final retirement plan approved by the Council, as described in OAR 345-027-0110, the
16 Council shall notify the certificate holder and request that the certificate holder submit a
17 proposed final retirement plan to the Office within a reasonable time not to exceed 90
18 days. If the certificate holder does not submit a proposed final retirement plan by the
19 specified date, the Council may direct the Department to prepare a proposed a final
20 retirement plan for the Council's approval. Upon the Council's approval of the final
21 retirement plan, the Council may draw on the bond or letter of credit described in
22 section (8) to restore the site to a useful, non-hazardous condition according to the final
23 retirement plan, in addition to any penalties the Council may impose under OAR
24 Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to
25 pay the actual cost of retirement, the certificate holder shall pay any additional cost
26 necessary to restore the site to a useful, non-hazardous condition. After completion of
27 site restoration, the Council shall issue an order to terminate the site certificate if the
28 Council finds that the facility has been retired according to the approved final
29 retirement plan.

30 17 OAR 345-027-0023(4): If the facility includes any transmission line under Council
31 jurisdiction:

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

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

39 18 OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a transmission line
40 or has, as a related or supporting facility, a pipeline or transmission line, the Council
41 shall specify an approved corridor in the site certificate and shall allow the certificate

1 holder to construct the pipeline or transmission line anywhere within the corridor,
2 subject to the conditions of the site certificate. If the applicant has analyzed more than
3 one corridor in its application for a site certificate, the Council may, subject to the
4 Council's standards, approve more than one corridor.

5 **19** OAR 345-027-0028: The following general monitoring conditions apply:

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

13 (b) The certificate holder shall implement the approved monitoring programs
14 described in section (a) and monitoring programs required by permitting agencies and
15 local governments.

16 (c) For each monitoring program described in sections (1) and (2), the certificate
17 holder shall have quality assurance measures approved by the Department before
18 beginning construction or, as appropriate, before beginning commercial operation.

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

23 **20** OAR 345-026-0048: Following receipt of a site certificate or an amended site certificate,
24 the certificate holder shall implement a plan that verifies compliance with all site
25 certificate terms and conditions and applicable statutes and rules. As a part of the
26 compliance plan, to verify compliance with the requirement to begin construction by
27 the date specified in the site certificate, the certificate holder shall report promptly to
28 the Department of Energy when construction begins. Construction is defined in OAR
29 345-001-0010. In reporting the beginning of construction, the certificate holder shall
30 describe all work on the site performed before beginning construction, including work
31 performed before the Council issued the site certificate, and shall state the cost of that
32 work. For the purpose of this exhibit, "work on the site" means any work within a site or
33 corridor, other than surveying, exploration or other activities to define or characterize
34 the site or corridor. The certificate holder shall document the compliance plan and
35 maintain it for inspection by the Department or the Council.

36 **21** OAR 345-026-0080: The certificate holder shall report according to the following
37 requirements:

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

40 (i) Within six months after beginning construction, and every six months
41 thereafter during construction of the energy facility and related or supporting facilities,
42 the certificate holder shall submit a semiannual construction progress report to the

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

19 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within
20 72 hours of any occurrence involving the facility if:

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

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

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

V. SPECIFIC FACILITY CONDITIONS

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

1. Certificate Administration Conditions

36 24 ~~The certificate holder shall request an amendment of the site certificate if the LJ North~~
37 ~~components are built or operated as part of the Pebble Springs Wind Project under the~~

1 | authority of a Gilliam County Conditional Use Permit. [Condition Deleted Amendment
2 | #2 (UF)]

3 | 25 The certificate holder shall begin construction of the facility by September 24, 2010.
4 | Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council
5 | Chair and the applicant. The Council may grant an extension of the deadline to begin
6 | construction in accordance with OAR 345-027-0030 or any successor rule in effect at the
7 | time the request for extension is submitted. [Amendment #1 (UF)]

8 | 26 The certificate holder shall complete construction of the facility by September 24, 2013.
9 | Construction is complete when: 1) the facility is substantially complete as defined by the
10 | certificate holder's construction contract documents, 2) acceptance testing has been
11 | satisfactorily completed and 3) the energy facility is ready to begin continuous operation
12 | consistent with the site certificate. The certificate holder shall promptly notify the
13 | Department of the date of completion of construction. The Council may grant an
14 | extension of the deadline for completing construction in accordance with OAR 345-027-
15 | 0030 or any successor rule in effect at the time the request for extension is submitted.
16 | [Amendment #1 (UF)]

17 | 27 The certificate holder shall construct a facility substantially as described in the site
18 | certificate and may select turbines of any type, subject to the following restrictions:
19 | (a) The total number of turbines at the facility must not exceed 47 ~~127~~ turbines.
20 | (b) The peak generating capacity of each turbine must not exceed 3.0 megawatts.
21 | (c) The combined peak generating capacity of the facility must not exceed 124
22 | ~~277~~ megawatts.
23 | (d) The turbine hub height must not exceed 100 meters, and the turbine blade tip
24 | height must not exceed 150 meters.
25 | (e) The minimum blade tip clearance must be 30 meters above ground.
26 | (f) The certificate holder shall request an amendment of the site certificate to
27 | increase the combined peak generating capacity of the facility or to increase the
28 | number of wind turbines or the dimensions of wind turbines at the facility.

29 | [Amendment #1 (UF)]

30 | 28 The certificate holder shall obtain all necessary federal, state and local permits or
31 | approvals required for construction, operation and retirement of the facility or ensure
32 | that its contractors obtain the necessary federal, state and local permits or approvals.

33 | 29 Before beginning construction, the certificate holder shall notify the Department in
34 | advance of any work on the site that does not meet the definition of "construction" in
35 | OAR 345-001-0010 or ORS 469.300 and shall provide to the Department a description of
36 | the work and evidence that its value is less than \$250,000.

37 | 30 Before beginning construction of the LJIA components as described in the *Final Order*
38 | *on Amendment #1 for UF*, the certificate holder shall submit to the State of Oregon
39 | through the Council a bond or letter of credit in the amount described herein naming
40 | the State of Oregon, acting by and through the Council, as beneficiary or payee. The

1 initial bond or letter of credit amount is \$8.847 million (in 2006 dollars), adjusted to the
2 date of issuance as described in (b), or the amount determined as described in (a). The
3 certificate holder shall adjust the amount of the bond or letter of credit on an annual
4 basis thereafter as described in (b).

5 (a) The certificate holder may adjust the amount of the bond or letter of credit
6 based on the final design configuration of the LJIA components by applying the unit
7 costs and general costs illustrated in Table 2 and Table 3 of the Final Order on the
8 Application to the final design and calculating the financial assurance amount as
9 described in that order, adjusted to the date of issuance as described in (b) and subject
10 to approval by the Department.

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

13 (i) Adjust the Subtotal component of the bond or letter of credit amount
14 (expressed in 2006 dollars) to present value, using the U.S. Gross Domestic Product
15 Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of
16 Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor
17 agency (the "Index") and using the annual average index value for 2006 dollars and the
18 quarterly index value for the date of issuance of the new bond or letter of credit. If at
19 any time the Index is no longer published, the Council shall select a comparable
20 calculation to adjust 2006 dollars to present value.

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

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

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

33 (e) The certificate holder shall describe the status of the bond or letter of credit in
34 the 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
36 before retirement of the facility site.

37 **[Amendment #2(UF)]**

38 **31** If the certificate holder elects to use a bond to meet the requirements of Condition 30
39 or Condition 101, the certificate holder shall ensure that the surety is obligated to
40 comply with the requirements of applicable statutes, Council rules and this site
41 certificate when the surety exercises any legal or contractual right it may have to
42 assume construction, operation or retirement of the energy facility. The certificate

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

5 32 Before beginning construction, the certificate holder shall notify the Department of the
6 identity and qualifications of major construction contractor(s) for specific portions of the
7 work. The certificate holder shall select contractors that have substantial experience in
8 the design and construction of similar facilities. The certificate holder shall report to the
9 Department any change of major construction 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 an on-site assistant construction
16 manager who is qualified in environmental compliance to ensure compliance with all
17 construction-related site certificate conditions. During operation, the certificate holder
18 shall have a project manager who is qualified in environmental compliance to ensure
19 compliance with all ongoing site certificate conditions. The certificate holder shall notify
20 the Department of the name, telephone number, fax number and e-mail address of
21 these managers and shall keep the Department informed of any change in this
22 information.

23 35 Within 72 hours after discovery of conditions or circumstances that may violate the
24 terms or conditions of the site certificate, the certificate holder shall report the
25 conditions or circumstances to the Department.

2. Land Use Conditions

26 36 The certificate holder shall cooperate with the Gilliam County Road Department to
27 ensure that any unusual damage or wear to county roads that is caused by construction
28 of the facility is repaired by the certificate holder. Upon completion of construction, the
29 certificate holder shall restore county roads to pre-construction condition or better, to
30 the satisfaction of the County Road Department.

31 37 During construction, the certificate holder shall implement measures to reduce traffic
32 impacts, including:

33 (a) Providing notice to adjacent landowners when heavy construction traffic is
34 anticipated.

35 (b) Providing appropriate traffic safety signage and warnings.

36 (c) Requiring flaggers to be at appropriate locations at appropriate times during
37 construction to direct traffic reduce accident risks.

38 (d) Using traffic diversion equipment (such as advanced signage and pilot cars) when
39 slow or oversize construction loads are anticipated.

1 (e) Maintaining at least one travel lane at all times to the extent reasonably possible
2 so that roads will not be closed to traffic because of construction vehicles. [Amendment
3 #1 **(UF)**]

4 (f) Encouraging carpooling for the construction workforce.

5 (g) Including traffic control procedures in contract specifications for construction of
6 the facility.

7 (h) Keeping the access from Highway 19 free of gravel that tracks out onto the
8 highway.

9 **38** The certificate holder shall ensure that no equipment or machinery is parked or stored
10 on any county road except while in use.

11 **39** The certificate holder shall construct all facility components in compliance with the
12 following setback requirements:

13 (a) All facility components must be at least 3,520 feet from the property line of
14 properties zoned residential use or designated in the Gilliam County Comprehensive
15 Plan as residential.

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

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

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

26 (e) The certificate holder shall maintain a minimum distance of 250 feet measured
27 from the center line of each turbine tower to the nearest edge of any railroad right-of-
28 way or electrical substation.

29 (f) The certificate holder shall maintain a minimum distance of 250 feet measured
30 from the center line of each meteorological tower to the nearest edge of any public
31 road right-of-way or railroad right-of-way, nearest boundary of the certificate holder's
32 lease area or nearest electrical substation.

33 (g) The certificate holder shall maintain a minimum distance of 50 feet measured
34 from any facility O&M building to the nearest edge of any public road right-of-way or
35 railroad right-of-way or the nearest boundary of the certificate holder's lease area.

36 (h) The certificate holder shall maintain a minimum distance of 50 feet measured
37 from any substation to the nearest edge of any public road right-of-way or railroad
38 right-of-way or the nearest boundary of the certificate holder's electrical substation
39 easement or, if there is no easement, the nearest boundary of the certificate holder's
40 lease area.

41 [Amendment #1 **(UF)**]

- 1 40 The certificate holder shall consult with area landowners and lessees during
2 construction and operation of the facility and shall implement measures to reduce or
3 avoid any adverse impacts to farm practices on surrounding lands and to avoid any
4 increase in farming costs.
- 5 41 The certificate holder shall locate access roads and temporary construction laydown and
6 staging areas to minimize disturbance with farming practices and, wherever feasible,
7 shall place turbines and transmission interconnection lines along the margins of
8 cultivated areas to reduce the potential for conflict with farm operations.
- 9 42 Before beginning construction of any phase of the facility, the certificate holder shall
10 record in the real property records of Gilliam County a Covenant Not to Sue with regard
11 to generally accepted farming practices on farmland adjacent to the construction area
12 consistent with Gilliam County Zoning Ordinance 7.020(T)(4)(a)(5). [Amendment #1
13 (LJF)]
- 14 43 The certificate holder shall install lockable gates at the substation and on private access
15 roads.
- 16 44 Within 90 days after beginning operation of any phase of the facility, the certificate
17 holder shall provide to the Department and to the Gilliam County Planning Director
18 the actual latitude and longitude location or Stateplane NA D 83(91) coordinates of
19 each turbine tower, connecting line and transmission line built in that phase. In
20 addition, the certificate holder shall provide to the Department and to the Gilliam
21 County Planning Director, a summary of as-built changes in the facility compared to
22 the original plan, if any. [Amendment #1 (LJF)]

3. Cultural Resource Conditions

- 23 45 Before beginning construction of the LJIA components as described in the *Final Order*
24 *on Amendment #1 for LJF*, the certificate holder shall provide to the Department a map
25 showing the final design locations of all LJIA components and areas that would be
26 disturbed during their construction and also showing the LJIA areas that were surveyed
27 in 2004, 2005 and 2006 for cultural resources as described in the site certificate
28 application. If areas to be disturbed during construction lie outside of the surveyed
29 areas, the certificate holder shall hire qualified personnel to conduct field investigation
30 of those areas. The certificate holder shall provide a written report of the field
31 investigation to the Department and to the State Historic Preservation Office (SHPO). If
32 any historic, cultural or archaeological resources are found during the field investigation,
33 the certificate holder shall ensure that construction and operation of the facility will
34 have no impact on the resources. The certificate holder shall instruct all construction
35 personnel to avoid the areas where resources were identified in the 2004-2006 surveys
36 or were found during pre-construction investigations and shall implement other
37 appropriate measures to protect the resources. [Amendment #2 (LJF)]

- 1 46 The certificate holder shall ensure that a qualified person instructs construction
2 personnel in the identification of cultural materials and avoidance of accidental damage
3 to identified resource sites.
- 4 47 The certificate holder shall ensure that construction personnel cease all ground-
5 disturbing activities in the immediate area if any archaeological or cultural resources are
6 found during construction of the facility until a qualified archaeologist can evaluate the
7 significance of the find. The certificate holder shall notify the Department and the State
8 Historic Preservation Office (SHPO) of the find. If the archaeologist determines that the
9 resource is significant, the certificate holder shall make recommendations to the Council
10 for mitigation, including avoidance or data recovery, in consultation with the
11 Department, SHPO and other appropriate parties. The certificate holder shall not restart
12 work in the affected area until the certificate holder has demonstrated to the
13 Department that it has complied with the archaeological permit requirements
14 administered by SHPO.
- 15 48 During construction of the LJIA components as described in the *Final Order on*
16 *Amendment #1 for LJE*, the certificate holder shall label all identified historic, cultural or
17 archaeological resource sites on construction maps and drawings as “no entry” areas,
18 and if construction activities will occur within 200 feet of an identified site, the
19 certificate holder shall flag a 50-foot buffer around the site. ~~During construction of the~~
20 ~~LJIB components, the certificate holder shall label the site identified as LJ 4/10/09 8 in~~
21 ~~the Request for Amendment #1 on construction maps and drawings as a “no entry”~~
22 ~~area, and if construction will occur within 200 feet of the site, the certificate holder shall~~
23 ~~flag a 50 foot buffer around the site. [Amendment #1-2 (LJF)]~~

4. Geotechnical Conditions

- 24 49 Before beginning construction ~~of any phase~~ of the facility, the certificate holder shall
25 conduct site-specific geotechnical investigation of that phase and shall report its findings
26 to the Oregon Department of Geology & Mineral Industries (DOGAMI). The certificate
27 holder shall conduct the geotechnical investigation after consultation with DOGAMI and
28 in general accordance with DOGAMI open file report 00-04 “Guidelines for Engineering
29 Geologic Reports and Site-Specific Seismic Hazard Reports.” [Amendment #2 (LJF)]
- 30 50 The certificate holder shall design and construct the facility in accordance with
31 requirements set forth by the State of Oregon’s Building Code Division and any other
32 applicable codes and design procedures. The certificate holder shall design all
33 components of the facility to meet or exceed the minimum standards required by the
34 2003 International Building Code.
- 35 51 The certificate holder shall design, engineer and construct the facility to avoid dangers
36 to human safety presented by non-seismic hazards. As used in this condition, “non-
37 seismic hazards” include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

- 1 52 The certificate holder shall notify the Department within 72 hours of any accidents
2 including mechanical failures on the site associated with construction or operation of
3 the facility that may result in public health and safety concerns.
- 4 53 Before beginning construction of any phase of the facility, the certificate holder shall
5 submit Notices of Proposed Construction or Alteration to the Federal Aviation
6 Administration (FAA) and the Oregon Department of Aviation identifying the proposed
7 final locations of the turbines and related or supporting facilities in that phase of
8 construction. The certificate holder shall promptly notify the Department of the
9 responses from the FAA and the Oregon Department of Aviation. [Amendment #1 (UF)]
- 10 54 To protect the public from electrical hazards, the certificate holder shall enclose the
11 facility substations with appropriate fencing and locked gates.
- 12 55 The certificate holder shall construct turbine towers that are smooth steel structures
13 with no exterior ladders or access to the turbine blades and shall install locked access
14 doors accessible only to authorized personnel.
- 15 56 The certificate holder shall follow manufacturers' recommended handling instructions
16 and procedures to prevent damage to towers or blades that could lead to failure.
- 17 57 The certificate holder shall have an operational safety monitoring program and shall
18 inspect turbine blades on a regular basis for signs of wear. The certificate holder shall
19 repair turbine blades as necessary to protect public safety.
- 20 58 The certificate holder shall install and maintain self-monitoring devices on each turbine,
21 linked to sensors at the operations and maintenance building, to alert operators to
22 potentially dangerous conditions, and the certificate holder shall immediately remedy
23 any dangerous conditions. The certificate holder shall maintain automatic equipment
24 protection features in each turbine that would shut down the turbine and reduce the
25 chance of a mechanical problem causing a fire.
- 26 59 The certificate holder shall install generator step-up transformers at the base of each
27 tower in locked cabinets designed to protect the public from electrical hazards and shall
28 design the cabinets to avoid creation of artificial habitat for raptor prey.
- 29 60 The certificate holder shall construct turbines on concrete pads with a minimum of 10
30 feet of non-flammable and non-erosive ground cover on all sides. The certificate holder
31 shall cover turbine pad areas with non-erosive material immediately following exposure
32 during construction and shall maintain the pad area covering during operation of the
33 facility.
- 34 61 During construction and operation of the facility, the certificate holder shall develop and
35 implement fire safety plans in consultation with the North Gilliam County Rural Fire
36 Protection District and the Arlington Fire Department to minimize the risk of fire and to
37 respond appropriately to any fires that occur on the facility site. In developing the fire
38 safety plans, the certificate holder should take into account the dry nature of the region

- 1 and should address risks on a seasonal basis. The certificate holder shall meet annually
2 with District and Fire Department personnel to discuss emergency planning and shall
3 invite District and Fire Department personnel to observe any emergency drill or tower
4 rescue training conducted at the facility.
- 5 62 During construction and operation of the facility, the certificate holder shall ensure that
6 the O&M buildings and all service vehicles are equipped with shovels and portable fire
7 extinguishers of a 4A5OBC or equivalent rating.
- 8 63 During construction, the certificate holder shall ensure that construction vehicles and
9 equipment are operated on graveled areas to the extent possible and that open flames,
10 such as cutting torches, are kept away from dry grass areas.
- 11 64 Upon the beginning of operation of the facility, the certificate holder shall provide to
12 North Gilliam County Rural Fire Protection District and the Arlington Fire Department a
13 site plan indicating the identification number assigned to each turbine and the location
14 of all facility structures. During operation, the certificate holder will ensure that
15 appropriate District and Fire Department personnel have an up-to-date list of the names
16 and telephone numbers of facility personnel available to respond on a 24-hour basis in
17 case of an emergency on the facility site.
- 18 65 During operation, the certificate holder shall ensure that all on-site employees receive
19 annual fire prevention and response training, including tower rescue training, by
20 qualified instructors or members of the local fire department and that all employees are
21 instructed to keep vehicles on roads and off dry grassland, except when off-road
22 operation is required for emergency purposes.
- 23 66 During construction, the certificate holder shall require that all on-site construction
24 contractors develop and implement a site health and safety plan that informs workers
25 and others on-site what to do in case of an emergency and that includes the locations of
26 fire extinguishers and nearby hospitals, important telephone numbers and first aid
27 techniques. The certificate holder shall ensure that construction contractors have
28 personnel on-site who are trained and equipped for tower rescue and who are first aid
29 and CPR certified.
- 30 67 During operation, the certificate holder shall develop and implement a site health and
31 safety plan that informs employees and others on-site what to do in case of an
32 emergency and that includes the locations of fire extinguishers and nearby hospitals,
33 important telephone numbers and first aid techniques.
- 34 68 The certificate holder shall handle any hazardous materials used on the site in a manner
35 that protects public health, safety and the environment and shall comply with all
36 applicable local, state and federal environmental laws and regulations.
- 37 69 If a spill or release of hazardous materials occurs during construction or operation of the
38 facility, the certificate holder shall notify the Department within 72 hours and shall clean
39 up the spill or release and dispose of any contaminated soil or other materials according

1 to applicable regulations. The certificate holder shall make sure that spill kits containing
2 items such as absorbent pads are located on equipment and storage facilities to respond
3 to accidental spills and shall instruct employees handling hazardous materials in the
4 proper handling, storage and cleanup of these materials.

6. Water, Soils, Streams & Wetlands Conditions

5 70 The certificate holder shall conduct all construction work in compliance with an Erosion
6 and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of
7 Environmental Quality and as required under the National Pollutant Discharge
8 Elimination System (NPDES) Storm Water Discharge General Permit #1200-C. The
9 certificate holder shall include in the ESCP any procedures necessary to meet local
10 erosion and sediment control requirements and storm water management
11 requirements.

12 71 During construction, the certificate holder shall limit truck traffic to designated existing
13 and improved road surfaces to avoid soil compaction, to the extent possible.

14 72 During construction, the certificate holder shall avoid impacts to waters of the state in
15 the following manner:

16 (a) The certificate holder shall avoid any disturbance, including the placement of
17 poles for the collector line, within 25 feet of the stream channel in the area identified as
18 "S5" on Figure J-1 of the Site Certificate Application.

19 (b) The certificate holder shall avoid any disturbance to the six wetland areas
20 identified as "W1" through "W6" on Figure J-1 of the Site Certificate Application and the
21 wetland area identified as "W 8" in the Request for Amendment #1 for LIF, Attachment
22 11, Figure 6. [Amendment #2 (LIF)].

23 (c) The certificate holder shall avoid any disturbance to the stream channels
24 identified as "S24" and "S25" on Figure J-1 of the Site Certificate Application.

25 (d) Before beginning construction affecting the location identified as "S27" on Figure
26 J-1 of the Site Certificate Application, the certificate holder shall apply for and obtain a
27 Removal/Fill Permit from the Department of State Lands, which, in accordance with ORS
28 469.401, shall issue the permit substantially in the form of Attachment F of the *Final*
29 *Order on the Application* and subject only to the conditions of this site certificate
30 including substantive requirements listed in that attachment.

31 (e) Before beginning construction of any phase of the facility, the certificate holder
32 shall determine whether any construction disturbance in that phase would occur in
33 locations not previously investigated for potential jurisdictional waters as described in
34 the Final Orders on the Application and Amendment #1 for LIF. The certificate holder
35 shall conduct pre-construction investigations to determine whether any jurisdictional
36 waters exist in those locations. The certificate holder shall submit a written report on
37 the pre-construction investigation to the Department of Energy and to the Department
38 of State Lands for approval before beginning construction of any phase of the facility
39 and shall ensure that construction of that phase would have no impact on any
40 jurisdictional water identified in the report. [Amendment #2 (LIF)]

- 1 73 During construction, the certificate holder shall ensure that the wash down of concrete
2 trucks occurs only at a contractor-owned batch plant or at tower foundation locations. If
3 such wash down occurs at tower foundation locations, then the certificate holder shall
4 ensure that wash down wastewater does not run off the construction site into
5 otherwise undisturbed areas and that the wastewater is disposed of on backfill piles and
6 buried underground with the backfill over the tower foundation.
- 7 74 The certificate holder shall restore areas outside the permanent footprint that are
8 disturbed during construction according to the methods and monitoring procedures
9 described in the *Revegetation Plan* that is incorporated in the *Final Order on*
10 *Amendment #2 for LUF* as Attachment F and as amended from time to time.
11 [Amendment #2 (LUF)]
- 12 75 During facility operation, the certificate holder shall routinely inspect and maintain all
13 roads, pads and trenched areas and, as necessary, maintain or repair erosion control
14 measures. The certificate holder shall restore areas that are temporarily disturbed
15 during facility maintenance or repair activities to pre-disturbance condition or better.
- 16 76 During facility operation, the certificate holder shall obtain water for on-site uses from
17 one or more on-site wells, subject to compliance with any applicable permit
18 requirements, not exceeding 5,000 gallons per day. The certificate holder shall not
19 change the source of water for on-site uses without prior Department approval.
- 20 77 During facility operation, if blade-washing becomes necessary, the certificate holder
21 shall ensure that there is no runoff of wash water from the site or discharges to surface
22 waters, storm sewers or dry wells. The certificate holder shall not use more than 50
23 gallons of water per blade and shall not wash more than eight turbines (24 blades) per
24 week. The certificate holder shall not use acids, bases or metal brighteners with the
25 wash water. The certificate may use biodegradable, phosphate-free cleaners sparingly.
7. **Transmission Line & EMF Conditions**
- 26 78 The certificate holder shall install the 34.5-kV collector system underground to the
27 extent practical. The certificate holder shall install underground segments of the
28 collector system at a minimum depth of three feet. Where geotechnical conditions or
29 other engineering considerations require, the certificate holder may install segments of
30 the collector system aboveground, but the total length of aboveground segments must
31 not exceed 30 percent of the collector system, ~~excluding the optional parallel double-~~
32 ~~circuit 34.5 kV lines that may be built to carry power from the LUIB area to the LIIA~~
33 ~~substation as described in the Final Order on Amendment #1.~~ The certificate holder shall
34 construct aboveground segments of the collector system using single or double circuit
35 monopole design as described in the site certificate application. [Amendment #2 (LUF)]
- 36 79 At least 30 days before beginning preparation of detailed design and specifications for
37 the electrical transmission lines, the certificate holder shall consult with the Oregon
38 Public Utility Commission staff to ensure that transmission line designs and
39 specifications are consistent with applicable codes and standards.

- 1 **80** To protect public safety, the certificate holder shall design and maintain the
2 transmission lines so that:
- 3 (a) Alternating current electric fields during operation do not exceed 9 kV per meter
4 at one meter above the ground surface in areas accessible to the public.
- 5 (b) Induced voltages during operation are as low as reasonably achievable.
- 6 **81** The certificate holder shall take reasonable steps to reduce or manage human exposure
7 to electromagnetic fields, including but not limited to:
- 8 (a) Constructing all aboveground transmission lines at least 200 feet from any
9 residence or other occupied structure.
- 10 (b) Ensuring that the area near the facility substation is inaccessible to the public by
11 fencing the area.
- 12 (c) Constructing aboveground 34.5-kV transmission lines with a minimum clearance
13 of 25 feet from the ground.
- 14 (d) Constructing all aboveground 230-kV transmission lines with a minimum
15 clearance of 30 feet from the ground.
- 16 (e) Providing to landowners a map of underground and overhead transmission lines
17 on their property and advising landowners of possible health risks.
- 18 [Amendment #1 **LJF**]

8. Plants, Wildlife & Habitat Protection Conditions

- 19 **82** During construction and operation of the facility, the certificate holder shall implement
20 a plan to control the introduction and spread of noxious weeds. The certificate shall
21 develop the weed control plan in consultation with the Gilliam County Weed Control
22 Board.
- 23 **83** The certificate holder shall design all aboveground transmission line support structures
24 following the practices suggested by the Avian Powerline Interaction Committee (2006)
25 and shall install anti-perching devices on transmission pole tops and cross arms where
26 the poles are located within ½ mile of turbines. [Amendment #1 **LJF**]
- 27 **84** The certificate holder may construct turbines and other facility components within the
28 site boundary as described in the Final Orders on the Application and Amendment #1
29 **for the LJF**, subject to the following requirements addressing potential habitat impact:
- 30 (a) The certificate holder shall not construct any facility components within areas of
31 Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.
- 32 (b) The certificate holder shall design and construct facility components that are the
33 minimum size needed for safe operation of the energy facility.
- 34 (c) In the final design of the facility within micro-siting areas, the certificate holder
35 shall reduce impact on essential or important habitat (Category 4 and above) to the
36 extent practical.
- 37 (d) As a protective measure during construction, the certificate holder shall install
38 exclusion fencing around confirmed populations of ~~Laurent's milk vetch (identified in~~
39 ~~the Request for Amendment #1 for the LJF, Attachment 7, p. 13)~~ and sessile mousetail

1 (identified in Figure Q-3 of the site certificate application). The certificate holder shall
2 not install facility components or cause temporary disturbance within these areas.
3 Before beginning construction, the certificate holder shall verify the protected status of
4 sessile mousetail and notify the Department. If the species has been upgraded to
5 threatened or endangered under State or federal law, the certificate holder shall take
6 appropriate mitigation actions, subject to Department approval. **[Amendment #2 (LJF)]**

7 (e) If construction would affect locations within the microsites areas that were not
8 previously surveyed for the occurrence of State or federal threatened or endangered
9 species as described in the Final Orders on the Application and Amendment #1 for LJF,
10 the certificate holder shall conduct additional pre-construction surveys of those
11 locations, notify the Department of the findings and implement appropriate avoidance
12 or mitigation measures for any threatened or endangered species detected, subject to
13 Department approval.

14 **[Amendment #2 (LJF)]**

15 **85** The certificate holder shall implement measures to mitigate impacts to sensitive wildlife
16 habitat during construction and operation including, but not limited to, the following:

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

19 (b) Before beginning construction of any phase of the facility, the certificate holder
20 shall have a qualified biologist place exclusion markers around sensitive wildlife habitat
21 areas for that phase of construction, including Category 1 Washington ground squirrel
22 (WGS) areas and an appropriate buffer around these areas. The certificate holder shall
23 maintain the exclusion markings until that phase of construction has been completed.

24 (c) Ensuring that a qualified person instructs construction and operations personnel
25 to be aware of wildlife in the area and to take precautions to avoid injuring or
26 destroying wildlife or sensitive wildlife habitat.

27 (d) Avoiding unnecessary road construction, temporary disturbance and vehicle use.
28 Posting and maintaining speed limit signs (not to exceed 20 miles per hour) on access
29 roads throughout the site. The certificate holder shall ensure that all construction and
30 operations personnel are instructed to observe caution when driving in the facility area
31 to avoid injury or disturbance to wildlife enforce and for personal safety.

32 **[Amendment #1 (LJF)]**

33 **86** During construction of any phase of the facility, the certificate holder shall protect the
34 area within a 1300-foot buffer around active nests of the following species during the
35 sensitive period, as provided in this condition:

<u>Species</u>	<u>Sensitive Period</u>	<u>Early Release Date</u>
Swainson's hawk	April 1 to August 15	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

1 During the year in which construction of any phase of the facility occurs, the certificate
2 holder shall use a protocol approved by the Oregon Department of Fish and Wildlife
3 (ODFW) to determine whether there are any active nests of these species within a half-
4 mile of any areas that would be disturbed during construction of that phase. If a nest is
5 occupied by any of these species after the beginning of the sensitive period, the
6 certificate holder shall not engage in high-impact construction activities (activities that
7 involve blasting, grading or other major ground disturbance) or allow high levels of
8 construction traffic within 1300 feet of the nest site. In addition, the certificate holder
9 will flag the boundaries of the 1300-foot buffer area and shall instruct construction
10 personnel to avoid any unnecessary activity within the buffer area. The certificate
11 holder shall hire an independent biological monitor to observe the active nest sites
12 during the sensitive period for signs of disturbance and to notify the Department of any
13 non-compliance with this condition. If the monitor observes nest site abandonment or
14 other adverse impact to nesting activity, the certificate holder shall implement
15 appropriate mitigation, in consultation with ODFW and subject to the approval of the
16 Department, unless the adverse impact is clearly shown to have a cause other than
17 construction activity. The certificate holder may begin or resume high-impact
18 construction activities before the ending day of the sensitive period if any known nest
19 site is not occupied by the early release date. If a nest site is occupied, then the
20 certificate holder may begin or resume high-impact construction before the ending day
21 of the sensitive period with the approval of ODFW, after the young are fledged. The
22 certificate holder shall use a protocol approved by ODFW to determine when the young
23 are fledged (the young are independent of the core nest site).

24 [Amendment #1 (LJF)]

25 87 The certificate holder shall conduct wildlife monitoring as described in the *Wildlife*
26 *Monitoring and Mitigation Plan* that is incorporated in the *Final Order on Amendment*
27 *#2for LJF* as Attachment D and as amended from time to time. [Amendment #2 (LJF)]

28 88 Before beginning construction of the LJIA components as described in the *Final Order*
29 *on Amendment #1 for LJF*, the certificate holder shall obtain an Incidental Take Permit
30 (ITP) letter from the Oregon Department of Fish and Wildlife (ODFW) that incorporates
31 the terms and commitments of the ITP application as set forth in Attachment E of the
32 *Final Order on the Application*. [Amendment #2 (LJF)]

33 89 The certificate holder shall acquire the legal right to create, enhance, maintain and
34 protect a habitat mitigation area as long as the site certificate is in effect by means of an
35 outright purchase, conservation easement or similar conveyance and shall provide a
36 copy of the documentation to the Department. Within the habitat mitigation area, the
37 certificate holder shall improve the habitat quality as described in the *Habitat*
38 *Mitigation Plan* that is incorporated in the *Final Order on Amendment #2for LJF* as
39 Attachment E and as amended from time to time. [Amendment #2 (LJF)]

9. Visual Effects Conditions

1 90 To reduce the visual impact of the facility, the certificate holder shall:

2 (a) Mount nacelles on smooth steel towers, painted uniformly in a neutral white
3 color.

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

6 (c) Not allow any advertising on any part of the facility.

7 (d) Use only those signs required for facility safety or required by law, except that
8 the certificate holder may erect a sign to identify the facility.

9 (e) Maintain any signs allowed under this condition in good repair.

10 91 The certificate holder shall design and construct the operation and maintenance
11 buildings to be generally consistent with the character of similar buildings used by
12 commercial farmers or ranchers in the area and shall paint the building in a neutral color
13 to blend with the surrounding landscape.

14 92 The certificate holder shall not use exterior lighting at the facility except:

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

17 (b) Security lighting at the operations and maintenance buildings and at the
18 substations, provided that such lighting is shielded or downward-directed to reduce
19 glare.

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

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

23 [Amendment #1 (LUF)]

10. Noise Control Conditions

24 93 To reduce noise impacts at nearby residential areas, the certificate holder shall:

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

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

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

31 94 Before beginning construction of any phase of the facility, the certificate holder shall
32 provide to the Department:

33 (a) Information that identifies the final design locations of all turbines to be built in
34 that phase of construction.

35 (b) The maximum sound power level of the turbines and substation transformers
36 based on manufacturers' warranties or confirmed by other means acceptable to the
37 Department.

1 (c) The results of noise analysis of the facility to be built according to the final design
2 performed in a manner consistent with the requirements of OAR 340-035-
3 0035(1)(b)(B)(iii)(IV) and (VI) demonstrating to the satisfaction of the Department that
4 the total noise generated by the facility (including the noise from turbines and
5 substation transformers) would meet the ambient noise degradation test and maximum
6 allowable test at the appropriate measurement point for all potentially-affected noise
7 sensitive properties.

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

19 [Amendment #1 **UF**]

20 95 During operation, the certificate holder shall maintain a complaint response system to
21 address noise complaints. The certificate holder shall promptly notify the Department of
22 any complaints received regarding facility noise and of any actions taken by the
23 certificate holder to address those complaints.

11. Waste Management Conditions

24 96 The certificate holder shall provide portable toilets for on-site sewage handling during
25 construction and shall ensure that they are pumped and cleaned regularly by a licensed
26 contractor who is qualified to pump and clean portable toilet facilities.

27 97 During operation, the certificate holder shall discharge sanitary wastewater generated
28 at the O&M building to a licensed on-site septic system in compliance with county
29 permit requirements. The certificate holder shall design the septic system design with a
30 capacity that is less than 2,500 gallons per day.

31 98 The certificate holder shall implement a waste management plan during construction
32 that includes but is not limited to the following measures:

33 (a) Training construction personnel to minimize and recycle solid waste.

34 (b) Minimizing the generation of wastes from construction through detailed
35 estimating of materials needs and through efficient construction practices.

36 (c) Recycling steel and other metal scrap.

37 (d) Recycling wood waste.

38 (e) Recycling packaging wastes such as paper and cardboard.

1 (f) Collecting non-recyclable waste for transport to a landfill by a licensed waste
2 hauler.

3 (g) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent
4 materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for
5 disposal by a licensed firm specializing in the proper recycling or disposal of hazardous
6 wastes.

7 99 The certificate holder may dispose of waste concrete on site with the permission of the
8 landowner and in accordance with OAR 340-093-0080 and other applicable regulations.
9 The certificate holder shall dispose of waste concrete on site by placing the material in
10 an excavated hole, covering it with at least three feet of topsoil and grading the area to
11 match existing contours. If the waste concrete is not disposed of on site, the certificate
12 holder shall arrange for proper disposal in a landfill.

13 100 The certificate holder shall implement a waste management plan during operation that
14 includes but is not limited to the following measures:

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

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

17 (c) Recycling used oil and hydraulic fluid.

18 (d) Collecting non-recyclable waste for transport to a landfill by a licensed waste
19 hauler.

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

24 VI. CONDITIONS ADDED BY AMENDMENT #1 FOR LIF

25 101 ~~Before beginning construction of the LIFB components as described in the Final Order~~
26 ~~on Amendment #1, the certificate holder shall submit to the State of Oregon through the~~
27 ~~Council a bond or letter of credit in the amount described herein naming the State of~~
28 ~~Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or~~
29 ~~letter of credit amount is \$7.281 million (in 4th Quarter 2009 dollars), adjusted to the~~
30 ~~date of issuance as described in (b), or the amount determined as described in (a). The~~
31 ~~certificate holder shall adjust the amount of the bond or letter of credit on an annual~~
32 ~~basis thereafter as described in (b).~~

33 ~~The certificate holder may adjust the amount of the bond or letter of credit based on~~
34 ~~the final design configuration of the LIFB components by applying the unit costs and~~
35 ~~general costs illustrated in Table 2 of the Final Order on Amendment #1 to the final~~
36 ~~design and calculating the financial assurance amount as described in that order,~~
37 ~~adjusted to the date of issuance as described in (b) and subject to the approval by the~~
38 ~~Department~~

39 ~~(a) The certificate holder shall adjust the amount of the bond or letter of credit,~~
40 ~~using the following calculation and subject to approval by the Department:~~

1 (i) ~~Adjust the Subtotal component of the bond or letter of credit amount~~
2 ~~(expressed in 4th Quarter 2009 dollars) to present value, using the U.S. Gross~~
3 ~~Domestic Product Implicit Price Deflator, Chain Weight, as published in the Oregon~~
4 ~~Department of Administrative Services "Oregon Economic and Revenue Forecast" or~~
5 ~~by any successor agency (the "Index") and using the index value for 4th Quarter 2009~~
6 ~~dollars and the quarterly index value for the date of issuance of the new bond or letter~~
7 ~~of credit. If at any time the Index is no longer published, the Council shall select a~~
8 ~~comparable calculation to adjust 4th Quarter 2009 dollars to present value~~

9 (ii) ~~Add 1 percent of the adjusted Subtotal (i) for the adjusted performance~~
10 ~~bond amount to determine the adjusted Gross Cost~~

11 (iii) ~~Add 10 percent of the adjusted Gross Cost for the adjusted administration~~
12 ~~and project management costs and 10 percent of the adjusted Gross Cost for the~~
13 ~~adjusted future developments contingency~~

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

17 ~~The certificate holder shall use a form of bond or letter of credit approved by the~~
18 ~~Council.~~

19 (b) ~~The certificate holder shall use an issuer of the bond or letter of credit approved~~
20 ~~by the Council.~~

21 (c) ~~The Certificate holder shall describe the status of the bond or letter of credit in~~
22 ~~the annual report submitted to the Council under Condition 21.~~

23 ~~The bond or letter of credit shall not be subject to revocation or reduction before~~
24 ~~retirement of the facility site. [Condition deleted by Amendment #2 (LJF)].~~

25
26 102 ~~Before beginning construction of the LIIIB components as described in the Final Order~~
27 ~~on Amendment #1, the certificate holder shall provide to the Department a map~~
28 ~~showing the final design locations of all LIIIB components, the areas that would be~~
29 ~~disturbed during construction and the areas that were surveyed in 2009 for historic,~~
30 ~~cultural or archaeological resources as described in the Request for Amendment #1. If~~
31 ~~areas to be disturbed during construction lie outside of the previously surveyed areas,~~
32 ~~the certificate holder shall hire qualified personnel to conduct field investigation of~~
33 ~~those areas. The certificate holder shall provide a written report of the field~~
34 ~~investigation to the Department and to the Oregon State historic Preservation Office~~
35 ~~(SHPO). If any potentially significant historic, cultural or archaeological resources sites~~
36 ~~are found during the field investigation, the certificate holder shall ensure that~~
37 ~~construction and operation of the facility will have no impact on the resources. The~~
38 ~~certificate holder shall instruct all construction personnel to avoid the areas where~~
39 ~~resources were identified in the 2009 surveys or were found during pre-construction~~
40 ~~investigations and shall implement other appropriate measures to protect the~~
41 ~~resources. [Condition deleted by Amendment #2 (LJF)].~~

1 103 ~~In reference to the approximate alignment of the Oregon Trail described in the Request~~
2 ~~for Amendment #1, the certificate holder shall comply with the following requirements:~~

3 ~~(a) The certificate holder shall not locate facility components on visible remnant of~~
4 ~~the Oregon Trail and shall avoid any construction disturbance to those remnants~~

5 ~~(b) The certificate holder shall not locate facility components on undeveloped land~~
6 ~~where the trail alignment is marked by existing Oregon-California Trail Association~~
7 ~~markers, as described in the Request for Amendment #1.~~

8 ~~(c) Before beginning construction of the LUB components described in the Final~~
9 ~~Order on Amendment #1, the certificate holder shall provide to the State Historic~~
10 ~~Preservation Office (SHPO) and the Department photographic documentation of the~~
11 ~~presumed Oregon Trail alignments within the site boundary~~

12 ~~The certificate holder shall ensure that construction personnel proceed carefully in~~
13 ~~the vicinity of the presumed alignments of the Oregon Trail. If any intact physical~~
14 ~~evidence of the trail is discovered, the certificate holder shall avoid any disturbance~~
15 ~~to the intact segments by redesign, re-engineering or restricting the area of the~~
16 ~~construction activity. The certificate holder shall promptly notify the SHPO and the~~
17 ~~Department to determine appropriate mitigation measures. [Condition deleted by~~
18 ~~Amendment #2 (LJF)]~~

19
20 104 ~~Before beginning construction of any new State highway approaches or utility crossing~~
21 ~~authorized by the Final Order on Amendment #1, the certificate holder shall obtain all~~
22 ~~required permits from the Oregon Department of Transportation (ODOT) subject to the~~
23 ~~applicable conditions required by OAR Chapter 734, Division 51 and 55. The certificate~~
24 ~~holder shall submit the necessary application or applications in a form satisfactory to~~
25 ~~ODOT and the Department of the location, construction and maintenance of approaches~~
26 ~~to State Highway 10 for access to the site. The certificate holder shall submit the~~
27 ~~necessary application or applications in a form satisfactory to ODOT and the~~
28 ~~Department for the location, construction and maintenance of collector cables or~~
29 ~~transmission lines crossing Highway 19. [Condition deleted by Amendment #2 (LJF)].~~

30 VII. SUCCESSORS AND ASSIGNS

31 To transfer this site certificate or any portion thereof or to assign or dispose of it in
32 any other manner, directly or indirectly, the certificate holder shall comply with OAR 345-
33 027-0100.

VIII. SEVERABILITY AND CONSTRUCTION

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

IX. GOVERNING LAW AND FORUM

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

X. EXECUTION

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

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

ENERGY FACILITY SITING COUNCIL

LEANING JUNIPER WIND POWER II, LLC

By: _____

W. Bryan Wolfe, Chair

Oregon Energy Facility Siting Council

Date: _____

By: _____

Print: _____

Date: _____

and

By: _____

Print: _____

Date: _____

Attachment B

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

**Site Certificate
for the
Leaning Juniper IIB Wind Power Facility**

June 21, 2013

The Oregon Energy Facility Siting Council
FIRST AMENDED SITE CERTIFICATE
FOR THE LEANING JUNIPER IIB WIND POWER FACILITY

I. INTRODUCTION

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

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
9 herein by this reference: (a) the Council's *Final Order on the Application* for the facility issued
10 on September 21, 2007, (b) the Council's *Final Order on Amendment #1 for LJF*, and (c) the
11 Council's Final Order on Amendment #2 for LJF. In interpreting this site certificate, any
12 ambiguity will be clarified by reference to the following, in order of priority: (1) this Site
13 Certificate, (2) the Final Order on Amendment #2 for LJF, (3) the *Final Order on Amendment*
14 *#1 for LJF*, (4) the *Final Order on the Application for LJF*, and (5) the record of the
15 proceedings that led to the Final Orders on the Application, Amendment #1, and
16 Amendment #2 for LJF. [Amendment #2 (LJF)]

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

II. SITE CERTIFICATION

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

- 1 compliance has been delegated by the federal government to a state agency other than
2 the Council. 469.503(3). [Amendment #2 (UF)]
- 3 4. Both the State and the certificate holder shall abide by local ordinances, state law and
4 the rules of the Council in effect on the date this site certificate is executed. ORS
5 469.401(2). In addition, upon a clear showing of a significant threat to public health,
6 safety or the environment that requires application of later-adopted laws or rules, the
7 Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).
- 8 5. For a permit, license or other approval addressed in and governed by this site
9 certificate, the certificate holder shall comply with applicable state and federal laws
10 adopted in the future to the extent that such compliance is required under the
11 respective state agency statutes and rules. ORS 469.401(2).
- 12 6. Subject to the conditions herein, this site certificate binds the State and all counties,
13 cities and political subdivisions in Oregon as to the approval of the site and the
14 construction, operation and retirement of the facility as to matters that are addressed in
15 and governed by this site certificate. ORS 469.401(3).
- 16 7. Each affected state agency, county, city and political subdivision in Oregon with
17 authority to issue a permit, license or other approval addressed in or governed by this
18 site certificate shall, upon submission of the proper application and payment of the
19 proper fees, but without hearings or other proceedings, issue such permit, license or
20 other approval subject only to conditions set forth in this site certificate. ORS
21 469.401(3).
- 22 8. After issuance of this site certificate, each state agency or local government agency that
23 issues a permit, license or other approval for the facility shall continue to exercise
24 enforcement authority over such permit, license or other approval. ORS 469.401(3).
- 25 9. After issuance of this site certificate, the Council shall have continuing authority over
26 the site and may inspect, or direct the Oregon Department of Energy (Department) to
27 inspect, or request another state agency or local government to inspect, the site at any
28 time in order to ensure that the facility is being operated consistently with the terms
29 and conditions of this site certificate. ORS 469.430.

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

30 The energy facility is an operating electric power generating plant with an average
31 electric generating capacity of approximately 37.92 megawatts and a peak generating
32 capacity of not more than 111.277 megawatts that produces power from wind energy. The
33 facility consists of not more than 74 ~~127~~ wind turbines. The maximum peak generating

1 capacity of each turbine is not more than 1.5 ~~3.0~~ megawatts. The energy facility is described
2 further in the Final Orders on the Application and Amendment #1 for the LJF. [Amendment
3 #2 (LJF)]

(b) Related or Supporting Facilities

4 The facility includes the following related or supporting facilities described below and
5 in greater detail in the Final Order on ~~Application on the facility~~ Amendment #2 for LJF:

- 6 • Power collection system
- 7 • Substations and interconnection system
- 8 • Meteorological towers
- 9 • Operations and maintenance facilities
- 10 • Control system
- 11 • Access roads
- 12 • ~~Temporary construction areas~~ [deleted Amendment #2 (LJF)]

13 Power Collection System

14 A power collection system operating at 34.5 kilovolts (kV) transports power from
15 each turbine to a collector substation. To the extent practicable, the collection system is
16 installed underground at a depth of at least three feet. Not more than 30 percent of the
17 collector system is installed aboveground.

18 Substations and Interconnection System

19 The facility includes a centrally located collector substation located near
20 theturbines. An above ground 230-kV transmission line carries the power from the
21 substation to the Bonneville Power Administration (BPA) Jones Canyon Switching Station
22 and an interconnection with the regional transmission grid through BPA's McNary-Santiam
23 230-kV transmission line. [Amendment #2 (LJF)]

24

25 ~~The facility includes a substation located near the Bonneville Power Administration (BPA)~~
26 ~~Jones Canyon Switching Station. An aboveground transmission line less than 400 feet in~~
27 ~~length carries the power from the substation to a BPA switching station and an~~
28 ~~interconnection with the regional transmission grid through BPA's McNary-Santiam 230-kV~~
29 ~~transmission line. The facility may include a second substation located within the area added~~
30 ~~to the facility by Amendment #1 (LJIB) and a 230-kV transmission line to carry power from~~
31 ~~the second substation to the facility substation located near the Jones Canyon Switching~~
32 ~~Station. Alternatively, the facility may include two parallel double-circuit 34.5-kV lines to~~
33 ~~carry power from the LJIB area to the facility substation. [Amendment #1]~~

34

35 Meteorological Towers

1 The facility includes ~~two~~ ~~four~~ permanent meteorological (met) towers. The met
2 towers are non-guyed steel towers approximately 80 meters in height. [Amendment #2
3 (LJF)]

4 Operations and Maintenance Facilities

5 The facility includes one ~~or two~~ operations and maintenance (O&M) buildings with
6 approximately 1.5 acres of fenced, graveled parking and storage area adjacent to each
7 building. [Amendment #2 (LJF)]

8 Control System

9 A fiber optic communications network links the wind turbines to a central computer
10 at the O&M buildings. A “supervisory, control and data acquisition” (SCADA) system collects
11 operating and performance data from each wind turbine and from the project as a whole
12 and allows remote operation of the wind turbines.

13 Access Roads

14 The facility includes access roads to provide access to the turbine strings.

15 Temporary Construction Areas

16 ~~During construction, the facility includes temporary laydown areas used to stage~~
17 ~~construction and store supplies and equipment. Construction crane paths are used to move~~
18 ~~construction cranes between turbine strings.~~ [Deleted Amendment #2 (LJF)]

2. Location of the Proposed Facility

19 The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in
20 Townships 1 and 2 North and Ranges 21 and 22 East. The facility is located on land subject to
21 lease agreements with landowners. [Amendment #2 (LJF)]

IV. CONDITIONS REQUIRED BY COUNCIL RULES

22 This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in
23 Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028
24 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation
25 Rules for Facilities). These conditions should be read together with the specific facility
26 conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter
27 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions,
28 “Office of Energy” means the Oregon Department of Energy, and the other definitions in
29 OAR 345-001-0010 apply.

30 The obligation of the certificate holder to report information to the Department or
31 the Council under the conditions listed in this section and in Section V is subject to the
32 provisions of ORS 192.502 *et seq.* and ORS 469.560. To the extent permitted by law, the
33 Department and the Council will not publicly disclose information that may be exempt from

1 public disclosure if the certificate holder has clearly labeled such information and stated the
2 basis for the exemption at the time of submitting the information to the Department or the
3 Council. If the Council or the Department receives a request for the disclosure of the
4 information, the Council or the Department, as appropriate, will make a reasonable attempt
5 to notify the certificate holder and will refer the matter to the Attorney General for a
6 determination of whether the exemption is applicable, pursuant to ORS 192.450.

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

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

17 1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate
18 except as provided for in OAR Chapter 345, Division 27.

19 2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site
20 to the Department of Energy within 90 days after beginning operation of the facility. The
21 legal description required by this rule means a description of metes and bounds or a
22 description of the site by reference to a map and geographic data that clearly and
23 specifically identifies the outer boundaries that contain all parts of the facility.

24 3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire
25 the facility:

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

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

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

31 4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of
32 the facility by the dates specified in the site certificate. *(See conditions 25 and 26.)*

33 5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed
34 for wind energy facilities, transmission lines or pipelines under this section, the
35 certificate holder shall not begin construction, as defined in OAR 345-001-0010, or
36 create a clearing on any part of the site until the certificate holder has construction
37 rights on all parts of the site. For the purpose of this rule, "construction rights" means
38 the legal right to engage in construction activities. For wind energy facilities,

1 transmission lines or pipelines, if the certificate holder does not have construction rights
2 on all parts of the site, the certificate holder may nevertheless begin construction, as
3 defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate
4 holder has construction rights on that part of the site and:

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

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

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

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

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

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

37 10 OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all
38 representations in the site certificate application and supporting record the Council
39 deems to be binding commitments made by the applicant.

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

1 pay the actual cost of retirement, the certificate holder shall pay any additional cost
2 necessary to restore the site to a useful, non-hazardous condition. After completion of
3 site restoration, the Council shall issue an order to terminate the site certificate if the
4 Council finds that the facility has been retired according to the approved final
5 retirement plan.

6 17 OAR 345-027-0023(4): If the facility includes any transmission line under Council
7 jurisdiction:

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

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

15 18 OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a transmission line
16 or has, as a related or supporting facility, a pipeline or transmission line, the Council
17 shall specify an approved corridor in the site certificate and shall allow the certificate
18 holder to construct the pipeline or transmission line anywhere within the corridor,
19 subject to the conditions of the site certificate. If the applicant has analyzed more than
20 one corridor in its application for a site certificate, the Council may, subject to the
21 Council's standards, approve more than one corridor.

22 19 OAR 345-027-0028: The following general monitoring conditions apply:

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

30 (b) The certificate holder shall implement the approved monitoring programs
31 described in section (a) and monitoring programs required by permitting agencies and
32 local governments.

33 (c) For each monitoring program described in sections (1) and (2), the certificate
34 holder shall have quality assurance measures approved by the Department before
35 beginning construction or, as appropriate, before beginning commercial operation.

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

1 20 OAR 345-026-0048: Following receipt of a site certificate or an amended site certificate,
2 the certificate holder shall implement a plan that verifies compliance with all site
3 certificate terms and conditions and applicable statutes and rules. As a part of the
4 compliance plan, to verify compliance with the requirement to begin construction by
5 the date specified in the site certificate, the certificate holder shall report promptly to
6 the Department of Energy when construction begins. Construction is defined in OAR
7 345-001-0010. In reporting the beginning of construction, the certificate holder shall
8 describe all work on the site performed before beginning construction, including work
9 performed before the Council issued the site certificate, and shall state the cost of that
10 work. For the purpose of this exhibit, "work on the site" means any work within a site or
11 corridor, other than surveying, exploration or other activities to define or characterize
12 the site or corridor. The certificate holder shall document the compliance plan and
13 maintain it for inspection by the Department or the Council.

14 21 OAR 345-026-0080: The certificate holder shall report according to the following
15 requirements:

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

18 (i) Within six months after beginning construction, and every six months
19 thereafter during construction of the energy facility and related or supporting facilities,
20 the certificate holder shall submit a semiannual construction progress report to the
21 Department of Energy. In each construction progress report, the certificate holder
22 shall describe any significant changes to major milestones for construction. The
23 certificate holder shall include such information related to construction as specified in
24 the site certificate. When the reporting date coincides, the certificate holder may
25 include the construction progress report within the annual report described in this
26 rule.

27 (ii) By April 30 of each year after beginning construction, the certificate holder
28 shall submit an annual report to the Department addressing the subjects listed in this
29 rule. The Council Secretary and the certificate holder may, by mutual agreement,
30 change the reporting date.

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

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

37 (i) Facility Status: An overview of site conditions, the status of facilities under
38 construction and a summary of the operating experience of facilities that are in
39 operation. In this section of the annual report, the certificate holder shall describe any
40 unusual events, such as earthquakes, extraordinary windstorms, major accidents or

1 the like that occurred during the year and that had a significant adverse impact on the
2 facility.

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

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

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

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

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

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

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

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

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

35 22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange
36 copies of all correspondence or summaries of correspondence related to compliance
37 with statutes, rules and local ordinances on which the Council determined compliance,
38 except for material withheld from public disclosure under state or federal law or under
39 Council rules. The certificate holder may submit abstracts of reports in place of full

1 reports; however, the certificate holder shall provide full copies of abstracted reports
2 and any summarized correspondence at the request of the Department.

3 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within
4 72 hours of any occurrence involving the facility if:

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

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

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

V. SPECIFIC FACILITY CONDITIONS

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

1. Certificate Administration Conditions

20 24 ~~The certificate holder shall request an amendment of the site certificate if the LJ-North~~
21 ~~components are built or operated as part of the Pebble Springs Wind Project under the~~
22 ~~authority of a Gilliam County Conditional Use Permit. Condition deleted by~~
23 ~~Amendment #2 (LJF)~~

24 25 The certificate holder shall begin construction of the facility by September 24, 2010.
25 Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council
26 Chair and the applicant. The Council may grant an extension of the deadline to begin
27 construction in accordance with OAR 345-027-0030 or any successor rule in effect at the
28 time the request for extension is submitted. [Amendment #1 (LJF)]

29 26 The certificate holder shall complete construction of the facility by September 24, 2013.
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
35 extension of the deadline for completing construction in accordance with OAR 345-027-

1 0030 or any successor rule in effect at the time the request for extension is submitted.
2 [Amendment #1 (LJF)]

- 3 27 The certificate holder shall construct a facility substantially as described in the site
4 certificate and may select turbines of any type, subject to the following restrictions:
5 (a) The total number of turbines at the facility must not exceed 80 ~~127~~ turbines.
6 (b) The peak generating capacity of each turbine must not exceed 3.0 megawatts.
7 (c) The combined peak generating capacity of the facility must not exceed 153 ~~277~~
8 megawatts.
9 (d) The turbine hub height must not exceed 100 meters, and the turbine blade tip
10 height must not exceed 150 meters.
11 (e) The minimum blade tip clearance must be 30 meters above ground.
12 (f) The certificate holder shall request an amendment of the site certificate to
13 increase the combined peak generating capacity of the facility or to increase the
14 number of wind turbines or the dimensions of wind turbines at the facility.

15 [Amendment #2 (LJF)]
16

17 28 The certificate holder shall obtain all necessary federal, state and local permits or
18 approvals required for construction, operation and retirement of the facility or ensure
19 that its contractors obtain the necessary federal, state and local permits or approvals.

20 29 Before beginning construction, the certificate holder shall notify the Department in
21 advance of any work on the site that does not meet the definition of "construction" in
22 OAR 345-001-0010 or ORS 469.300 and shall provide to the Department a description of
23 the work and evidence that its value is less than \$250,000.

24 30 ~~{Before beginning construction of the LJIA components as described in the Final Order~~
25 ~~on Amendment #1, the certificate holder shall submit to the State of Oregon through~~
26 ~~the Council a bond or letter of credit in the amount described herein naming the State~~
27 ~~of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond~~
28 ~~or letter of credit amount is \$8.847 million (in 2006 dollars), adjusted to the date of~~
29 ~~issuance as described in (b), or the amount determined as described in (a). The~~
30 ~~certificate holder shall adjust the amount of the bond or letter of credit on an annual~~
31 ~~basis thereafter as described in (b).~~

32 ~~The certificate holder may adjust the amount of the bond or letter of credit based on~~
33 ~~the final design configuration of the LJIA components by applying the unit costs and~~
34 ~~general costs illustrated in Table 2 and Table 3 of the Final Order on the Application~~
35 ~~to the final design and calculating the financial assurance amount as described in that~~
36 ~~order, adjusted to the date of issuance as described in (b) and subject to approval by~~
37 ~~the Department.~~

38 ~~(a) The certificate holder shall adjust the amount of the bond or letter of credit,~~
39 ~~using the following calculation and subject to approval by the Department:~~

1 (i) ~~Adjust the Subtotal component of the bond or letter of credit amount~~
2 ~~(expressed in 2006 dollars) to present value, using the U.S. Gross Domestic Product~~
3 ~~Implicit Price Deflator, Chain Weight, as published in the Oregon Department of~~
4 ~~Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor~~
5 ~~agency (the "Index") and using the annual average index value for 2006 dollars and the~~
6 ~~quarterly index value for the date of issuance of the new bond or letter of credit. If at~~
7 ~~any time the Index is no longer published, the Council shall select a comparable~~
8 ~~calculation to adjust 2006 dollars to present value.~~

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

11 (iii) ~~Add 10 percent of the adjusted Gross Cost for the adjusted administration~~
12 ~~and project management costs and 10 percent of the adjusted Gross Cost for the~~
13 ~~adjusted future developments contingency.~~

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

17 (b) ~~The certificate holder shall use a form of bond or letter of credit approved by~~
18 ~~the Council.~~

19 (c) ~~The certificate holder shall use an issuer of the bond or letter of credit approved~~
20 ~~by the Council.~~

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

23 ~~The bond or letter of credit shall not be subject to revocation or reduction before~~
24 ~~retirement of the facility site.~~

25 ~~[Amendment #1] Condition deleted by Amendment #2 (UF).~~

26
27 31 If the certificate holder elects to use a bond to meet the requirements of Condition 30
28 or Condition 101, the certificate holder shall ensure that the surety is obligated to
29 comply with the requirements of applicable statutes, Council rules and this site
30 certificate when the surety exercises any legal or contractual right it may have to
31 assume construction, operation or retirement of the energy facility. The certificate
32 holder shall also ensure that the surety is obligated to notify the Council that it is
33 exercising such rights and to obtain any Council approvals required by applicable
34 statutes, Council rules and this site certificate before the surety commences any activity
35 to complete construction, operate or retire the energy facility. [Amendment #1]

36 32 Before beginning construction, the certificate holder shall notify the Department of the
37 identity and qualifications of major construction contractor(s) for specific portions of the
38 work. The certificate holder shall select contractors that have substantial experience in

1 the design and construction of similar facilities. The certificate holder shall report to the
2 Department any change of major construction contractors.

3 33 The certificate holder shall contractually require all construction contractors and
4 subcontractors involved in the construction of the facility to comply with all applicable
5 laws and regulations and with the terms and conditions of the site certificate. Such
6 contractual provisions shall not operate to relieve the certificate holder of responsibility
7 under the site certificate.

8 34 During construction, the certificate holder shall have an on-site assistant construction
9 manager who is qualified in environmental compliance to ensure compliance with all
10 construction-related site certificate conditions. During operation, the certificate holder
11 shall have a project manager who is qualified in environmental compliance to ensure
12 compliance with all ongoing site certificate conditions. The certificate holder shall notify
13 the Department of the name, telephone number, fax number and e-mail address of
14 these managers and shall keep the Department informed of any change in this
15 information.

16 35 Within 72 hours after discovery of conditions or circumstances that may violate the
17 terms or conditions of the site certificate, the certificate holder shall report the
18 conditions or circumstances to the Department.

2. Land Use Conditions

19 1. The certificate holder shall cooperate with the Gilliam County Road
20 Department to ensure that any unusual damage or wear to county
21 roads that is caused by construction of the facility is repaired by
22 the certificate holder. Upon completion of construction, the
23 certificate holder shall restore county roads to pre-construction
24 condition or better, to the satisfaction of the County Road
25 Department.

26 37 During construction, the certificate holder shall implement measures to reduce traffic
27 impacts, including:

28 (a) Providing notice to adjacent landowners when heavy construction traffic is
29 anticipated.

30 (b) Providing appropriate traffic safety signage and warnings.

31 (c) Requiring flaggers to be at appropriate locations at appropriate times during
32 construction to direct traffic reduce accident risks.

33 (d) Using traffic diversion equipment (such as advanced signage and pilot cars)
34 when slow or oversize construction loads are anticipated.

35 (e) Maintaining at least one travel lane at all times to the extent reasonably
36 possible so that roads will not be closed to traffic because of construction vehicles.

37 [Amendment #1 (UF)]

- 1 (f) Encouraging carpooling for the construction workforce.
- 2 (g) Including traffic control procedures in contract specifications for construction of
- 3 the facility.
- 4 (h) Keeping the access from Highway 19 free of gravel that tracks out onto the
- 5 highway.
- 6 **38** The certificate holder shall ensure that no equipment or machinery is parked or stored
- 7 on any county road except while in use.
- 8 **39** The certificate holder shall construct all facility components in compliance with the
- 9 following setback requirements:
- 10 (a) All facility components must be at least 3,520 feet from the property line of
- 11 properties zoned residential use or designated in the Gilliam County Comprehensive
- 12 Plan as residential.
- 13 (b) Where (a) does not apply, the certificate holder shall maintain a minimum
- 14 distance of 110-percent of maximum blade tip height, measured from the centerline of
- 15 the turbine tower to the nearest edge of any public road right-of-way. The certificate
- 16 holder shall assume a minimum right-of-way width of 60 feet.
- 17 (c) Where (a) does not apply, the certificate holder shall maintain a minimum
- 18 distance of 1,320 feet, measured from the centerline of the turbine tower to the center
- 19 of the nearest residence existing at the time of tower construction.
- 20 (d) Where (a) does not apply, the certificate holder shall maintain a minimum
- 21 distance of 110-percent of maximum blade tip height, measured from the centerline of
- 22 the turbine tower to the nearest boundary of the certificate holder's lease area.
- 23 (e) The certificate holder shall maintain a minimum distance of 250 feet measured
- 24 from the center line of each turbine tower to the nearest edge of any railroad right-of-
- 25 way or electrical substation.
- 26 (f) The certificate holder shall maintain a minimum distance of 250 feet measured
- 27 from the center line of each meteorological tower to the nearest edge of any public
- 28 road right-of-way or railroad right-of-way, nearest boundary of the certificate holder's
- 29 lease area or nearest electrical substation.
- 30 (g) The certificate holder shall maintain a minimum distance of 50 feet measured
- 31 from any facility O&M building to the nearest edge of any public road right-of-way or
- 32 railroad right-of-way or the nearest boundary of the certificate holder's lease area.
- 33 (h) The certificate holder shall maintain a minimum distance of 50 feet measured
- 34 from any substation to the nearest edge of any public road right-of-way or railroad
- 35 right-of-way or the nearest boundary of the certificate holder's electrical substation
- 36 easement or, if there is no easement, the nearest boundary of the certificate holder's
- 37 lease area.

38 [Amendment #1(LJF)]

- 1 40 The certificate holder shall consult with area landowners and lessees during
2 construction and operation of the facility and shall implement measures to reduce or
3 avoid any adverse impacts to farm practices on surrounding lands and to avoid any
4 increase in farming costs.
- 5 41 The certificate holder shall locate access roads and temporary construction laydown and
6 staging areas to minimize disturbance with farming practices and, wherever feasible,
7 shall place turbines and transmission interconnection lines along the margins of
8 cultivated areas to reduce the potential for conflict with farm operations.
- 9 42 Before beginning construction of any phase of the facility, the certificate holder shall
10 record in the real property records of Gilliam County a Covenant Not to Sue with regard
11 to generally accepted farming practices on farmland adjacent to the construction area
12 consistent with Gilliam County Zoning Ordinance 7.020(T)(4)(a)(5). [Amendment #1
13 (LUF)]
- 14 43 The certificate holder shall install lockable gates at the substation and on private access
15 roads.
- 16 44 Within 90 days after beginning operation of any phase of the facility, the certificate
17 holder shall provide to the Department and to the Gilliam County Planning Director
18 the actual latitude and longitude location or Stateplane NA D 83(91) coordinates of
19 each turbine tower, connecting line and transmission line built in that phase. In
20 addition, the certificate holder shall provide to the Department and to the Gilliam
21 County Planning Director, a summary of as-built changes in the facility compared to
22 the original plan, if any. [Amendment #1 (LUF)]

3. Cultural Resource Conditions

- 23 45 ~~Before beginning construction of the LIIIA components as described in the Final Order~~
24 ~~on Amendment #1, the certificate holder shall provide to the Department a map~~
25 ~~showing the final design locations of all LIIIA components and areas that would be~~
26 ~~disturbed during their construction and also showing the LIIIA areas that were surveyed~~
27 ~~in 2004, 2005 and 2006 for cultural resources as described in the site certificate~~
28 ~~application. If areas to be disturbed during construction lie outside of the surveyed~~
29 ~~areas, the certificate holder shall hire qualified personnel to conduct field investigation~~
30 ~~of those areas. The certificate holder shall provide a written report of the field~~
31 ~~investigation to the Department and to the State Historic Preservation Office (SHPO). If~~
32 ~~any historic, cultural or archaeological resources are found during the field investigation,~~
33 ~~the certificate holder shall ensure that construction and operation of the facility will~~
34 ~~have no impact on the resources. The certificate holder shall instruct all construction~~
35 ~~personnel to avoid the areas where resources were identified in the 2004-2006 surveys~~
36 ~~or were found during pre-construction investigations and shall implement other~~

1 appropriate measures to protect the resources. [Condition deleted by Amendment #2
2 (UF)]

3 46 The certificate holder shall ensure that a qualified person instructs construction
4 personnel in the identification of cultural materials and avoidance of accidental damage
5 to identified resource sites.

6 47 The certificate holder shall ensure that construction personnel cease all ground-
7 disturbing activities in the immediate area if any archaeological or cultural resources are
8 found during construction of the facility until a qualified archaeologist can evaluate the
9 significance of the find. The certificate holder shall notify the Department and the State
10 Historic Preservation Office (SHPO) of the find. If the archaeologist determines that the
11 resource is significant, the certificate holder shall make recommendations to the Council
12 for mitigation, including avoidance or data recovery, in consultation with the
13 Department, SHPO and other appropriate parties. The certificate holder shall not restart
14 work in the affected area until the certificate holder has demonstrated to the
15 Department that it has complied with the archaeological permit requirements
16 administered by SHPO.

17 48 ~~During construction of the LJIA components as described in the Final Order on~~
18 ~~Amendment #1, the certificate holder shall label all identified historic, cultural or~~
19 ~~archaeological resource sites on construction maps and drawings as "no entry" areas,~~
20 ~~and if construction activities will occur within 200 feet of an identified site, the~~
21 ~~certificate holder shall flag a 50-foot buffer around the site. During construction of the~~
22 ~~LJIB components, the certificate holder shall label the site identified as LJ-4/10/09-8 in~~
23 ~~the Request for Amendment #1 for UF on construction maps and drawings as a "no~~
24 ~~entry" area, and if construction will occur within 200 feet of the site, the certificate~~
25 ~~holder shall flag a 50-foot buffer around the site. [Amendment #2 (UF)]~~

4. Geotechnical Conditions

26 49 Before beginning construction of any phase of the facility, the certificate holder shall
27 conduct site-specific geotechnical investigation of that phase and shall report its findings
28 to the Oregon Department of Geology & Mineral Industries (DOGAMI). The certificate
29 holder shall conduct the geotechnical investigation after consultation with DOGAMI and
30 in general accordance with DOGAMI open file report 00-04 "Guidelines for Engineering
31 Geologic Reports and Site-Specific Seismic Hazard Reports." [Amendment #2 (UF)]

32 50 The certificate holder shall design and construct the facility in accordance with
33 requirements set forth by the State of Oregon's Building Code Division and any other
34 applicable codes and design procedures. The certificate holder shall design all
35 components of the facility to meet or exceed the minimum standards required by the
36 2003 International Building Code.

1 51 The certificate holder shall design, engineer and construct the facility to avoid dangers
2 to human safety presented by non-seismic hazards. As used in this condition, “non-
3 seismic hazards” include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

4 52 The certificate holder shall notify the Department within 72 hours of any accidents
5 including mechanical failures on the site associated with construction or operation of
6 the facility that may result in public health and safety concerns.

7 53 Before beginning construction of any phase of the facility, the certificate holder shall
8 submit Notices of Proposed Construction or Alteration to the Federal Aviation
9 Administration (FAA) and the Oregon Department of Aviation identifying the proposed
10 final locations of the turbines and related or supporting facilities in that phase of
11 construction. The certificate holder shall promptly notify the Department of the
12 responses from the FAA and the Oregon Department of Aviation. [Amendment #1 (UF)]

13 54 To protect the public from electrical hazards, the certificate holder shall enclose the
14 facility substations with appropriate fencing and locked gates.

15 55 The certificate holder shall construct turbine towers that are smooth steel structures
16 with no exterior ladders or access to the turbine blades and shall install locked access
17 doors accessible only to authorized personnel.

18 56 The certificate holder shall follow manufacturers’ recommended handling instructions
19 and procedures to prevent damage to towers or blades that could lead to failure.

20 57 The certificate holder shall have an operational safety monitoring program and shall
21 inspect turbine blades on a regular basis for signs of wear. The certificate holder shall
22 repair turbine blades as necessary to protect public safety.

23 58 The certificate holder shall install and maintain self-monitoring devices on each turbine,
24 linked to sensors at the operations and maintenance building, to alert operators to
25 potentially dangerous conditions, and the certificate holder shall immediately remedy
26 any dangerous conditions. The certificate holder shall maintain automatic equipment
27 protection features in each turbine that would shut down the turbine and reduce the
28 chance of a mechanical problem causing a fire.

29 59 The certificate holder shall install generator step-up transformers at the base of each
30 tower in locked cabinets designed to protect the public from electrical hazards and shall
31 design the cabinets to avoid creation of artificial habitat for raptor prey.

32 60 The certificate holder shall construct turbines on concrete pads with a minimum of 10
33 feet of non-flammable and non-erosive ground cover on all sides. The certificate holder
34 shall cover turbine pad areas with non-erosive material immediately following exposure
35 during construction and shall maintain the pad area covering during operation of the
36 facility.

- 1 61 During construction and operation of the facility, the certificate holder shall develop and
2 implement fire safety plans in consultation with the North Gilliam County Rural Fire
3 Protection District and the Arlington Fire Department to minimize the risk of fire and to
4 respond appropriately to any fires that occur on the facility site. In developing the fire
5 safety plans, the certificate holder should take into account the dry nature of the region
6 and should address risks on a seasonal basis. The certificate holder shall meet annually
7 with District and Fire Department personnel to discuss emergency planning and shall
8 invite District and Fire Department personnel to observe any emergency drill or tower
9 rescue training conducted at the facility.
- 10 62 During construction and operation of the facility, the certificate holder shall ensure that
11 the O&M buildings and all service vehicles are equipped with shovels and portable fire
12 extinguishers of a 4A50BC or equivalent rating.
- 13 63 During construction, the certificate holder shall ensure that construction vehicles and
14 equipment are operated on graveled areas to the extent possible and that open flames,
15 such as cutting torches, are kept away from dry grass areas.
- 16 64 Upon the beginning of operation of the facility, the certificate holder shall provide to
17 North Gilliam County Rural Fire Protection District and the Arlington Fire Department a
18 site plan indicating the identification number assigned to each turbine and the location
19 of all facility structures. During operation, the certificate holder will ensure that
20 appropriate District and Fire Department personnel have an up-to-date list of the names
21 and telephone numbers of facility personnel available to respond on a 24-hour basis in
22 case of an emergency on the facility site.
- 23 65 During operation, the certificate holder shall ensure that all on-site employees receive
24 annual fire prevention and response training, including tower rescue training, by
25 qualified instructors or members of the local fire department and that all employees are
26 instructed to keep vehicles on roads and off dry grassland, except when off-road
27 operation is required for emergency purposes.
- 28 66 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
30 and others on-site what to do in case of an emergency and that includes the locations of
31 fire extinguishers and nearby hospitals, important telephone numbers and first aid
32 techniques. The certificate holder shall ensure that construction contractors have
33 personnel on-site who are trained and equipped for tower rescue and who are first aid
34 and CPR certified.
- 35 67 During operation, the certificate holder shall develop and implement a site health and
36 safety plan that informs employees and others on-site what to do in case of an
37 emergency and that includes the locations of fire extinguishers and nearby hospitals,
38 important telephone numbers and first aid techniques.

1 **68** The certificate holder shall handle any hazardous materials used on the site in a manner
2 that protects public health, safety and the environment and shall comply with all
3 applicable local, state and federal environmental laws and regulations.

4 **69** If a reportable spill or release of hazardous materials occurs during construction or
5 operation of the facility, the certificate holder shall notify the Department within 72
6 hours and shall clean up the spill or release and dispose of any contaminated soil or
7 other materials according to applicable regulations. The certificate holder shall make
8 sure that spill kits containing items such as absorbent pads are located on equipment
9 and storage facilities to respond to accidental spills and shall instruct employees
10 handling hazardous materials in the proper handling, storage and cleanup of these
11 materials.

6. Water, Soils, Streams & Wetlands Conditions

12 **70** The certificate holder shall conduct all construction work in compliance with an Erosion
13 and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of
14 Environmental Quality and as required under the National Pollutant Discharge
15 Elimination System (NPDES) Storm Water Discharge General Permit #1200-C. The
16 certificate holder shall include in the ESCP any procedures necessary to meet local
17 erosion and sediment control requirements and storm water management
18 requirements.

19 **71** During construction, the certificate holder shall limit truck traffic to designated existing
20 and improved road surfaces to avoid soil compaction, to the extent possible.

21 **72** During construction, the certificate holder shall avoid impacts to waters of the state in
22 the following manner:

23 ~~(a) The certificate holder shall avoid any disturbance, including the placement of~~
24 ~~piles for the collector line, within 25 feet of the stream channel in the area identified as~~
25 ~~"S5" on Figure J-1 of the Site Certificate Application. [Condition deleted by Amendment~~
26 ~~#1 (LJF)]~~

27 (b) The certificate holder shall avoid any disturbance to the ~~six wetland areas~~
28 ~~identified as "W1" through "W6" on Figure J-1 of the Site Certificate Application and~~
29 ~~wetland area identified as "W-8" in the Request for Amendment #1~~for LJF, Attachment
30 11, Figure 6. [Amendment #2 (LJF)].

31 ~~(c) The certificate holder shall avoid any disturbance to the stream channels~~
32 ~~identified as "S24" and "S25" on Figure J-1 of the site Certificate Application. [Condition~~
33 ~~deleted by Amendment #2 (LJF)]~~

34 (d) ~~Before beginning construction affecting the location identified as "S27" on~~
35 ~~Figure J-1 of the Site Certificate Application, the certificate holder shall apply for and~~
36 ~~obtain a Removal/Fill Permit from the Department of State Lands, which, in accordance~~
37 ~~with ORS 469.401, shall issue the permit substantially in the form of Attachment F of~~

1 ~~the Final Order on the Application and subject only to the conditions of this site~~
2 ~~certificate including substantive requirements listed in that attachment. [Condition~~
3 ~~deleted by Amendment #2 (LJF)]~~

4 (e) Before beginning construction of any phase of the facility, the certificate holder
5 shall determine whether any construction disturbance in that phase would occur in
6 locations not previously investigated for potential jurisdictional waters as described in
7 the Final Orders on the Application and Amendment #1 for LJF. The certificate holder
8 shall conduct pre-construction investigations to determine whether any jurisdictional
9 waters exist in those locations. The certificate holder shall submit a written report on
10 the pre-construction investigation to the Department of Energy and to the Department
11 of State Lands for approval before beginning construction of any phase of the facility
12 and shall ensure that construction of that phase would have no impact on any
13 jurisdictional water identified in the report. [Amendment #2 (LJF)]

14 73 During construction, the certificate holder shall ensure that the wash down of concrete
15 trucks occurs only at a contractor-owned batch plant or at tower foundation locations. If
16 such wash down occurs at tower foundation locations, then the certificate holder shall
17 ensure that wash down wastewater does not run off the construction site into
18 otherwise undisturbed areas and that the wastewater is disposed of on backfill piles and
19 buried underground with the backfill over the tower foundation.

20 74 The certificate holder shall restore areas outside the permanent footprint that are
21 disturbed during construction according to the methods and monitoring procedures
22 described in the *Revegetation Plan* that is incorporated in the *Final Order on*
23 *Amendment #2 for LJF* as Attachment F and as amended from time to time.
24 [Amendment #2 (LJF)]

25 75 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 control
27 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 76 During facility operation, the certificate holder shall obtain water for on-site uses from
30 one or more on-site wells, subject to compliance with any applicable permit
31 requirements, not exceeding 5,000 gallons per day. The certificate holder shall not
32 change the source of water for on-site uses without prior Department approval.

33 77 During facility operation, if blade-washing becomes necessary, the certificate holder
34 shall ensure that there is no runoff of wash water from the site or discharges to surface
35 waters, storm sewers or dry wells. The certificate holder shall not use more than 50
36 gallons of water per blade and shall not wash more than eight turbines (24 blades) per
37 week. The certificate holder shall not use acids, bases or metal brighteners with the
38 wash water. The certificate may use biodegradable, phosphate-free cleaners sparingly.

7. Transmission Line & EMF Conditions

1 78 The certificate holder shall install the 34.5-kV collector system underground to the
2 extent practical. The certificate holder shall install underground segments of the
3 collector system at a minimum depth of three feet. Where geotechnical conditions or
4 other engineering considerations require, the certificate holder may install segments of
5 the collector system aboveground, but the total length of aboveground segments must
6 not exceed 30 percent of the collector system, ~~excluding the optional parallel double-~~
7 ~~circuit 34.5 kV lines that may be built to carry power from the LIIIB area to the LIIIA~~
8 ~~substations as described in the Final Order on Amendment #1.~~ The certificate holder
9 shall construct aboveground segments of the collector system using single or double
10 circuit monopole design as described in the site certificate application. [Amendment #2
11 (UF)]

12 79 At least 30 days before beginning preparation of detailed design and specifications for
13 the electrical transmission lines, the certificate holder shall consult with the Oregon
14 Public Utility Commission staff to ensure that transmission line designs and
15 specifications are consistent with applicable codes and standards.

16 80 To protect public safety, the certificate holder shall design and maintain the
17 transmission lines so that:
18 (a) Alternating current electric fields during operation do not exceed 9 kV per meter
19 at one meter above the ground surface in areas accessible to the public.
20 (b) Induced voltages during operation are as low as reasonably achievable.

21 81 The certificate holder shall take reasonable steps to reduce or manage human exposure
22 to electromagnetic fields, including but not limited to:

- 23 (a) Constructing all aboveground transmission lines at least 200 feet from any
24 residence or other occupied structure.
25 (b) Ensuring that the area near the facility substation is inaccessible to the public by
26 fencing the area.
27 (c) Constructing aboveground 34.5-kV transmission lines with a minimum clearance
28 of 25 feet from the ground.
29 (d) Constructing all aboveground 230-kV transmission lines with a minimum
30 clearance of 30 feet from the ground.
31 (e) Providing to landowners a map of underground and overhead transmission lines
32 on their property and advising landowners of possible health risks.

33 [Amendment #1 (UF)]

8. Plants, Wildlife & Habitat Protection Conditions

34 82 During construction and operation of the facility, the certificate holder shall implement
35 a plan to control the introduction and spread of noxious weeds. The certificate shall

1 develop the weed control plan in consultation with the Gilliam County Weed Control
2 Board.

3 83 The certificate holder shall design all aboveground transmission line support structures
4 following the practices suggested by the Avian Powerline Interaction Committee (2006)
5 and shall install anti-perching devices on transmission pole tops and cross arms where
6 the poles are located within ½ mile of turbines. [Amendment #1 (UF)]

7 84 The certificate holder may construct turbines and other facility components within the
8 site boundary as described in the Final Orders on the Application and Amendment #1
9 for UF, subject to the following requirements addressing potential habitat impact:

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

12 (b) The certificate holder shall design and construct facility components that are the
13 minimum size needed for safe operation of the energy facility.

14 (c) In the final design of the facility within microsites areas, the certificate holder
15 shall reduce impact on essential or important habitat (Category 4 and above) to the
16 extent practical.

17 (d) As a protective measure during construction, the certificate holder shall install
18 exclusion fencing around confirmed populations of Laurent's milk-vetch (identified in
19 the Request for Amendment #1 for UF, Attachment 7, p. 13) and sessile mousetail
20 (identified in Figure Q-3 of the site certificate application and Request for Amendment
21 #1 for UF, Attachment 7, p. 14). The certificate holder shall not install facility
22 components or cause temporary disturbance within these areas. Before beginning
23 construction, the certificate holder shall verify the protected status of sessile mousetail
24 and notify the Department. If the species has been upgraded to threatened or
25 endangered under State or federal law, the certificate holder shall take appropriate
26 mitigation actions, subject to Department approval.

27 (e) If construction would affect locations within the microsites areas that were not
28 previously surveyed for the occurrence of State or federal threatened or endangered
29 species as described in the Final Orders on the Application and Amendment #1 for UF,
30 the certificate holder shall conduct additional pre-construction surveys of those
31 locations, notify the Department of the findings and implement appropriate avoidance
32 or mitigation measures for any threatened or endangered species detected, subject to
33 Department approval. [Amendment #2 (UF)]

34 85 The certificate holder shall implement measures to mitigate impacts to sensitive wildlife
35 habitat during construction and operation including, but not limited to, the following:

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

38 (b) Before beginning construction of any phase of the facility, the certificate holder
39 shall have a qualified biologist place exclusion markers around sensitive wildlife habitat
40 areas for that phase of construction, including Category 1 Washington ground squirrel

1 (WGS) areas and an appropriate buffer around these areas. The certificate holder shall
2 maintain the exclusion markings until that phase of construction has been completed.

3 (c) Ensuring that a qualified person instructs construction and operations
4 personnel to be aware of wildlife in the area and to take precautions to avoid injuring
5 or destroying wildlife or sensitive wildlife habitat.

6 (d) Avoiding unnecessary road construction, temporary disturbance and vehicle
7 use. Posting and maintaining speed limit signs (not to exceed 20 miles per hour) on
8 access roads throughout the site. The certificate holder shall ensure that all
9 construction and operations personnel are instructed to observe caution when driving
10 in the facility area to avoid injury or disturbance to wildlife enforce and for personal
11 safety.

12 [Amendment #1 (UF)]

13 86 During construction of any phase of the facility, the certificate holder shall protect the
14 area within a 1300-foot buffer around active nests of the following species during the
15 sensitive period, as provided in this condition:

<u>Species</u>	<u>Sensitive Period</u>	<u>Early Release Date</u>
Swainson's hawk	April 1 to August 15	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

16 During the year in which construction of any phase of the facility occurs, the certificate
17 holder shall use a protocol approved by the Oregon Department of Fish and Wildlife
18 (ODFW) to determine whether there are any active nests of these species within a half-
19 mile of any areas that would be disturbed during construction of that phase. If a nest is
20 occupied by any of these species after the beginning of the sensitive period, the
21 certificate holder shall not engage in high-impact construction activities (activities that
22 involve blasting, grading or other major ground disturbance) or allow high levels of
23 construction traffic within 1300 feet of the nest site. In addition, the certificate holder
24 will flag the boundaries of the 1300-foot buffer area and shall instruct construction
25 personnel to avoid any unnecessary activity within the buffer area. The certificate
26 holder shall hire an independent biological monitor to observe the active nest sites
27 during the sensitive period for signs of disturbance and to notify the Department of any
28 non-compliance with this condition. If the monitor observes nest site abandonment or
29 other adverse impact to nesting activity, the certificate holder shall implement
30 appropriate mitigation, in consultation with ODFW and subject to the approval of the
31 Department, unless the adverse impact is clearly shown to have a cause other than
32 construction activity. The certificate holder may begin or resume high-impact
33 construction activities before the ending day of the sensitive period if any known nest

1 site is not occupied by the early release date. If a nest site is occupied, then the
2 certificate holder may begin or resume high-impact construction before the ending day
3 of the sensitive period with the approval of ODFW, after the young are fledged. The
4 certificate holder shall use a protocol approved by ODFW to determine when the young
5 are fledged (the young are independent of the core nest site).

6 [Amendment #1 (LJF)]

7 87 The certificate holder shall conduct wildlife monitoring as described in the *Wildlife*
8 *Monitoring and Mitigation Plan* that is incorporated in the *Final Order on Amendment*
9 *#2 for LJF* as Attachment D and as amended from time to time. [Amendment #2 (LJF)]

10 88 ~~Before beginning construction of the LJIA components as described in the *Final Order*~~
11 ~~on Amendment #1, the certificate holder shall obtain an Incidental Take Permit (ITP)~~
12 ~~letter from the Oregon Department of Fish and Wildlife (ODFW) that incorporates the~~
13 ~~terms and commitments of the ITP application as set forth in Attachment E of the *Final*~~
14 ~~Order on the Application. Condition deleted by Amendment #2 (LJF)~~

15 89 The certificate holder shall acquire the legal right to create, enhance, maintain and
16 protect a habitat mitigation area as long as the site certificate is in effect by means of an
17 outright purchase, conservation easement or similar conveyance and shall provide a
18 copy of the documentation to the Department. Within the habitat mitigation area, the
19 certificate holder shall improve the habitat quality as described in the *Habitat*
20 *Mitigation Plan* that is incorporated in the *Final Order on Amendment #2 for LJF* as
21 Attachment E and as amended from time to time. [Amendment #2 (LJF)]

9. Visual Effects Conditions

22 90 To reduce the visual impact of the facility, the certificate holder shall:

- 23 (a) Mount nacelles on smooth steel towers, painted uniformly in a neutral white
24 color.
- 25 (b) Paint substation structures in a neutral color to blend with the surrounding
26 landscape.
- 27 (c) Not allow any advertising on any part of the facility.
- 28 (d) Use only those signs required for facility safety or required by law, except that
29 the certificate holder may erect a sign to identify the facility.
- 30 (e) Maintain any signs allowed under this condition in good repair.

31 91 The certificate holder shall design and construct the operation and maintenance
32 buildings to be generally consistent with the character of similar buildings used by
33 commercial farmers or ranchers in the area and shall paint the building in a neutral color
34 to blend with the surrounding landscape.

35 92 The certificate holder shall not use exterior lighting at the facility except:

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

3 (b) Security lighting at the operations and maintenance buildings and at the
4 substations, provided that such lighting is shielded or downward-directed to reduce
5 glare.

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

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

9 [Amendment #1 **(UF)**]

10 **10. Noise Control Conditions**

11 **93** To reduce noise impacts at nearby residential areas, the certificate holder shall:

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

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

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

18 **94** Before beginning construction of any phase of the facility, the certificate holder shall
19 provide to the Department:

20 (a) Information that identifies the final design locations of all turbines to be built in
21 that phase of construction.

22 (b) The maximum sound power level of the turbines and substation transformers
23 based on manufacturers' warranties or confirmed by other means acceptable to the
24 Department.

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

32 (d) For each noise-sensitive property where the certificate holder relies on a noise
33 waiver to demonstrate compliance in accordance with OAR 340-035-
34 0035(1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant
35 pursuant to which the owner of the property authorizes the certificate holder's
36 operation of the facility to increase ambient statistical noise levels L_{10} and L_{50} by more
37 than 10 dBA at the appropriate measurement point. The legally-effective easement or
38 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

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

4 **[Amendment #1 (LJF)]**

5 **95** During operation, the certificate holder shall maintain a complaint response system to
6 address noise complaints. The certificate holder shall promptly notify the Department of
7 any complaints received regarding facility noise and of any actions taken by the
8 certificate holder to address those complaints.

11. Waste Management Conditions

9 **96** The certificate holder shall provide portable toilets for on-site sewage handling during
10 construction and shall ensure that they are pumped and cleaned regularly by a licensed
11 contractor who is qualified to pump and clean portable toilet facilities.

12 **97** During operation, the certificate holder shall discharge sanitary wastewater generated
13 at the O&M building to a licensed on-site septic system in compliance with county
14 permit requirements. The certificate holder shall design the septic system design with a
15 capacity that is less than 2,500 gallons per day.

16 **98** The certificate holder shall implement a waste management plan during construction
17 that includes but is not limited to the following measures:

18 (a) Training construction personnel to minimize and recycle solid waste.

19 (b) Minimizing the generation of wastes from construction through detailed
20 estimating of materials needs and through efficient construction practices.

21 (c) Recycling steel and other metal scrap.

22 (d) Recycling wood waste.

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

24 (f) Collecting non-recyclable waste for transport to a landfill by a licensed waste
25 hauler.

26 (g) 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 **99** The certificate holder may dispose of waste concrete on site with the permission of the
31 landowner and in accordance with OAR 340-093-0080 and other applicable regulations.
32 The certificate holder shall dispose of waste concrete on site by placing the material in
33 an excavated hole, covering it with at least three feet of topsoil and grading the area to
34 match existing contours. If the waste concrete is not disposed of on site, the certificate
35 holder shall arrange for proper disposal in a landfill.

- 1 100 The certificate holder shall implement a waste management plan during operation that
2 includes but is not limited to the following measures:
- 3 (a) Training employees to minimize and recycle solid waste.
 - 4 (b) Recycling paper products, metals, glass and plastics.
 - 5 (c) Recycling used oil and hydraulic fluid.
 - 6 (d) Collecting non-recyclable waste for transport to a landfill by a licensed waste
7 hauler.
 - 8 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and
9 oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium
10 batteries for disposal by a licensed firm specializing in the proper recycling or disposal
11 of hazardous wastes.

12 **VI. CONDITIONS ADDED BY AMENDMENT #1 OF LIF**

13 101 Before beginning construction of the LJIB components as described in the *Final Order*
14 *on Amendment #1 for LIF*, the certificate holder shall submit to the State of Oregon
15 through the Council a bond or letter of credit in the amount described herein naming
16 the State of Oregon, acting by and through the Council, as beneficiary or payee. The
17 initial bond or letter of credit amount is \$7.281 million (in 4th Quarter 2009 dollars),
18 adjusted to the date of issuance as described in (b), or the amount determined as
19 described in (a). The certificate holder shall adjust the amount of the bond or letter of
20 credit on an annual basis thereafter as described in (b).

21 (a) The certificate holder may adjust the amount of the bond or letter of credit
22 based on the final design configuration of the LJIB components by applying the unit
23 costs and general costs illustrated in Table 2 of the *Final Order on Amendment #1 for*
24 *LIF* to the final design and calculating the financial assurance amount as described in
25 that order, adjusted to the date of issuance as described in (b) and subject to approval
26 by the Department.

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

29 (i) Adjust the Subtotal component of the bond or letter of credit amount
30 (expressed in 4th Quarter 2009 dollars) to present value, using the U.S. Gross Domestic
31 Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department
32 of Administrative Services' "Oregon Economic and Revenue Forecast" or by any
33 successor agency (the "Index") and using the index value for 4th Quarter 2009 dollars
34 and the quarterly index value for the date of issuance of the new bond or letter of
35 credit. If at any time the Index is no longer published, the Council shall select a
36 comparable calculation to adjust 4th Quarter 2009 dollars to present value.

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

1 (iii) Add 10 percent of the adjusted Gross Cost for the adjusted administration
2 and project management costs and 10 percent of the adjusted Gross Cost for the
3 adjusted future developments contingency.

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

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

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

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

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

15 **[Amendment #2 (LJF)]**

16 102 Before beginning construction of the LJIB components as described in the *Final Order*
17 *on Amendment #1 for LJF*, the certificate holder shall provide to the Department a map
18 showing the final design locations of all LJIB components, the areas that would be
19 disturbed during construction and the areas that were surveyed in 2009 for historic,
20 cultural or archaeological resources as described in the Request for Amendment #1 for
21 LJF. If areas to be disturbed during construction lie outside of the previously surveyed
22 areas, the certificate holder shall hire qualified personnel to conduct field investigation
23 of those areas. The certificate holder shall provide a written report of the field
24 investigation to the Department and to the Oregon State Historic Preservation Office
25 (SHPO). If any potentially significant historic, cultural or archaeological resource sites are
26 found during the field investigation, the certificate holder shall ensure that construction
27 and operation of the facility will have no impact on the resources. The certificate holder
28 shall instruct all construction personnel to avoid the areas where resources were
29 identified in the 2009 surveys or were found during pre-construction investigations and
30 shall implement other appropriate measures to protect the resources.

31 **[Amendment #2 (LJF)]**

32 103 In reference to the approximate alignment of the Oregon Trail described in the Request
33 for Amendment #1 for LJF, the certificate holder shall comply with the following
34 requirements:

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

1 (b) The certificate holder shall not locate facility components on undeveloped land
2 where the trail alignment is marked by existing Oregon-California Trail Association
3 markers, as described in the Request for Amendment #1 for LJF.

4 (c) Before beginning construction of the LJIB components as described in the *Final*
5 *Order on Amendment #1 for LJF*, the certificate holder shall provide to the State
6 Historic Preservation Office (SHPO) and the Department photographic documentation
7 of the presumed Oregon Trail alignments within the site boundary.

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

15 **[Amendment #2 (LJF)]**

16 104 Before beginning construction of any new State Highway approaches or utility crossing
17 authorized by the *Final Order on Amendment #1 for LJF*, the certificate holder shall
18 obtain all required permits from the Oregon Department of Transportation (ODOT)
19 subject to the applicable conditions required by OAR Chapter 734, Divisions 51 and 55.
20 The certificate holder shall submit the necessary application or applications in a form
21 satisfactory to ODOT and the Department for the location, construction and
22 maintenance of approaches to State Highway 19 for access to the site. The certificate
23 holder shall submit the necessary application or applications in a form satisfactory to
24 ODOT and the Department for the location, construction and maintenance of collector
25 cables or transmission lines crossing Highway 19.

26 **[Amendment #2 (LJF)]**

27 **VII. CONDITIONS ADDED BY AMENDMENT # 2 OF LJF**

28 105 The transfer of the LJIB site certificate from the certificate holder to Portland
29 General Electric (PGE), the transferee, shall not be effective until PGE executes in closing
30 the form of site certificate naming PGE the certificate holder, which is attached as
31 Attachment C to the Final Order on Amendment #2. Upon closing, the LJIB site certificate
32 naming PGE as the certificate holder shall be in full force and effect and the LJIB site
33 certificate naming Leaning Juniper Wind Power II, LLC as the certificate holder shall be
34 considered rescinded and void in its entirety.

35 106 Should the closing contemplated in Condition 105 not occur within 18 months of
36 the effective date of the LJIB site certificate to LJWP, the Council's transfer approval within
37 the Final Order on Amendment #2 shall be void.

1 **107 PGE must provide the Department a copy of the executed LIIB site certificate and**
2 **documentation of the asset purchase agreement within 7 days of closing.**

3 **VIII. SUCCESSORS AND ASSIGNS**

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

7 **IX. SEVERABILITY AND CONSTRUCTION**

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

11 **X. GOVERNING LAW AND FORUM**

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

14 **XI. EXECUTION**

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

18
19 **IN WITNESS WHEREOF**, this site certificate has been executed by the State of Oregon, acting
20 by and through its Energy Facility Siting Council, and by Leaning Juniper Wind Power II, LLC.

21
22
23
24
25
26
27
28
29
30

ENERGY FACILITY SITING COUNCIL

LEANING JUNIPER WIND POWER II, LLC

By: _____

W. Bryan Wolfe, Chair

Oregon Energy Facility Siting Council

Date: _____

By: _____

Print: _____

Date: _____

and

By: _____

Print: _____

Date: _____

Attachment C

Leaning Juniper IIB

Form Site Certificate-PGE

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

**Site Certificate
for the
Leaning Juniper IIB Wind Power Facility**

June 21, 2013

The Oregon Energy Facility Siting Council
~~FIRST AMENDED~~ SITE CERTIFICATE
FOR THE LEANING JUNIPER IIB WIND POWER FACILITY

I. INTRODUCTION

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

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
9 herein by this reference: (a) the Council's *Final Order on the Application* for the facility issued
10 on September 21, 2007, (b) the Council's *Final Order on Amendment #1 for LJF*, and (c) the
11 Council's Final Order on Amendment #2 for LJF. In interpreting this site certificate, any
12 ambiguity will be clarified by reference to the following, in order of priority: (1) this Site
13 Certificate, (2) the Final Order on Amendment #2 for LJF, (3) the *Final Order on Amendment*
14 *#1 for LJF*, (4) the *Final Order on the Application for LJF*, and (5) the record of the
15 proceedings that led to the Final Orders on the Application, Amendment #1, and
16 Amendment #2 for LJF. [Amendment #2 (LJF)]

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

II. SITE CERTIFICATION

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

- 1 compliance has been delegated by the federal government to a state agency other than
2 the Council. 469.503(3). [Amendment #2 (LF)]
- 3 4. Both the State and the certificate holder shall abide by local ordinances, state law and
4 the rules of the Council in effect on the date this site certificate is executed. ORS
5 469.401(2). In addition, upon a clear showing of a significant threat to public health,
6 safety or the environment that requires application of later-adopted laws or rules, the
7 Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).
- 8 5. For a permit, license or other approval addressed in and governed by this site
9 certificate, the certificate holder shall comply with applicable state and federal laws
10 adopted in the future to the extent that such compliance is required under the
11 respective state agency statutes and rules. ORS 469.401(2).
- 12 6. Subject to the conditions herein, this site certificate binds the State and all counties,
13 cities and political subdivisions in Oregon as to the approval of the site and the
14 construction, operation and retirement of the facility as to matters that are addressed in
15 and governed by this site certificate. ORS 469.401(3).
- 16 7. Each affected state agency, county, city and political subdivision in Oregon with
17 authority to issue a permit, license or other approval addressed in or governed by this
18 site certificate shall, upon submission of the proper application and payment of the
19 proper fees, but without hearings or other proceedings, issue such permit, license or
20 other approval subject only to conditions set forth in this site certificate. ORS
21 469.401(3).
- 22 8. After issuance of this site certificate, each state agency or local government agency that
23 issues a permit, license or other approval for the facility shall continue to exercise
24 enforcement authority over such permit, license or other approval. ORS 469.401(3).
- 25 9. After issuance of this site certificate, the Council shall have continuing authority over
26 the site and may inspect, or direct the Oregon Department of Energy (Department) to
27 inspect, or request another state agency or local government to inspect, the site at any
28 time in order to ensure that the facility is being operated consistently with the terms
29 and conditions of this site certificate. ORS 469.430.

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

30 The energy facility is an operating electric power generating plant with an average
31 electric generating capacity of approximately 37.92 megawatts and a peak generating
32 capacity of not more than 111.277 megawatts that produces power from wind energy. The
33 facility consists of not more than 74 ~~127~~ wind turbines. The maximum peak generating

1 capacity of each turbine is not more than 1.5 ~~3.0~~ megawatts. The energy facility is described
2 further in the Final Orders on the Application and Amendment #1 for the LJF. [Amendment
3 #2 (LJF)]

(b) Related or Supporting Facilities

4 The facility includes the following related or supporting facilities described below and
5 in greater detail in the Final Order on ~~Application on the facility~~ Amendment #2 for LJF:

- 6 • Power collection system
- 7 • Substations and interconnection system
- 8 • Meteorological towers
- 9 • Operations and maintenance facilities
- 10 • Control system
- 11 • Access roads
- 12 • ~~Temporary construction areas~~

13
14 **Power Collection System**

15 A power collection system operating at 34.5 kilovolts (kV) transports power from
16 each turbine to a collector substation. To the extent practicable, the collection system is
17 installed underground at a depth of at least three feet. Not more than 30 percent of the
18 collector system is installed aboveground.

19 **Substations and Interconnection System**

20 The facility includes a centrally located collector substation located near
21 the turbines. An above ground 230-kV transmission line carries the power from the
22 substation to the Bonneville Power Administration (BPA) Jones Canyon Switching Station
23 and an interconnection with the regional transmission grid through BPA's McNary-Santiam
24 230-kV transmission line. [Amendment #2 (LJF)]

25 ~~The facility includes a substation located near the Bonneville Power Administration (BPA)~~
26 ~~Jones Canyon Switching Station. An aboveground transmission line less than 400 feet in~~
27 ~~length carries the power from the substation to a BPA switching station and an~~
28 ~~interconnection with the regional transmission grid through BPA's McNary-Santiam 230-kV~~
29 ~~transmission line. The facility may include a second substation located within the area added~~
30 ~~to the facility by Amendment #1 (LJIB) and a 230-kV transmission line to carry power from~~
31 ~~the second substation to the facility substation located near the Jones Canyon Switching~~
32 ~~Station. Alternatively, the facility may include two parallel double circuit 34.5-kV lines to~~
33 ~~carry power from the LJIB area to the facility substation. [Amendment #1]~~

34 **Meteorological Towers**

1 The facility includes ~~two~~ four permanent meteorological (met) towers. The met
2 towers are non-guyed steel towers approximately 80 meters in height. [Amendment #2
3 (LF)]

4 Operations and Maintenance Facilities

5 The facility includes one ~~or two~~ operations and maintenance (O&M) buildings with
6 approximately 1.5 acres of fenced, graveled parking and storage area adjacent to each
7 building. [Amendment #2 (LF)]

8 Control System

9 A fiber optic communications network links the wind turbines to a central computer
10 at the O&M buildings. A "supervisory, control and data acquisition" (SCADA) system collects
11 operating and performance data from each wind turbine and from the project as a whole
12 and allows remote operation of the wind turbines.

13 Access Roads

14 The facility includes access roads to provide access to the turbine strings.

15 Temporary Construction Areas

16 ~~During construction, the facility includes temporary laydown areas used to stage~~
17 ~~construction and store supplies and equipment. Construction crane paths are used to move~~
18 ~~construction cranes between turbine strings.~~ [Deleted Amendment #2 (LF)]

2. Location of the Proposed Facility

19 The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in
20 Townships 1 and 2 North and Ranges 21 and 22 East. The facility is located on land subject to
21 lease agreements with landowners. [Amendment #2 (LF)]

IV. CONDITIONS REQUIRED BY COUNCIL RULES

22 This section lists conditions required by OAR 345-027-0020 (Mandatory Conditions in
23 Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028
24 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation
25 Rules for Facilities). These conditions should be read together with the specific facility
26 conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter
27 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions,
28 "Office of Energy" means the Oregon Department of Energy, and the other definitions in
29 OAR 345-001-0010 apply.

30 The obligation of the certificate holder to report information to the Department or
31 the Council under the conditions listed in this section and in Section V is subject to the
32 provisions of ORS 192.502 *et seq.* and ORS 469.560. To the extent permitted by law, the
33 Department and the Council will not publicly disclose information that may be exempt from

1 public disclosure if the certificate holder has clearly labeled such information and stated the
2 basis for the exemption at the time of submitting the information to the Department or the
3 Council. If the Council or the Department receives a request for the disclosure of the
4 information, the Council or the Department, as appropriate, will make a reasonable attempt
5 to notify the certificate holder and will refer the matter to the Attorney General for a
6 determination of whether the exemption is applicable, pursuant to ORS 192.450.

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

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

17 1 OAR 345-027-0020(1): The Council shall not change the conditions of the site certificate
18 except as provided for in OAR Chapter 345, Division 27.

19 2 OAR 345-027-0020(2): The certificate holder shall submit a legal description of the site
20 to the Department of Energy within 90 days after beginning operation of the facility. The
21 legal description required by this rule means a description of metes and bounds or a
22 description of the site by reference to a map and geographic data that clearly and
23 specifically identifies the outer boundaries that contain all parts of the facility.

24 3 OAR 345-027-0020(3): The certificate holder shall design, construct, operate and retire
25 the facility:

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

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

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

31 4 OAR 345-027-0020(4): The certificate holder shall begin and complete construction of
32 the facility by the dates specified in the site certificate. (*See conditions 25 and 26.*)

33 5 OAR 345-027-0020(5): Except as necessary for the initial survey or as otherwise allowed
34 for wind energy facilities, transmission lines or pipelines under this section, the
35 certificate holder shall not begin construction, as defined in OAR 345-001-0010, or
36 create a clearing on any part of the site until the certificate holder has construction
37 rights on all parts of the site. For the purpose of this rule, "construction rights" means
38 the legal right to engage in construction activities. For wind energy facilities,

1 transmission lines or pipelines, if the certificate holder does not have construction rights
2 on all parts of the site, the certificate holder may nevertheless begin construction, as
3 defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate
4 holder has construction rights on that part of the site and:

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

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

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

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

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

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

37 10 OAR 345-027-0020(10): The Council shall include as conditions in the site certificate all
38 representations in the site certificate application and supporting record the Council
39 deems to be binding commitments made by the applicant.

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

1 pay the actual cost of retirement, the certificate holder shall pay any additional cost
2 necessary to restore the site to a useful, non-hazardous condition. After completion of
3 site restoration, the Council shall issue an order to terminate the site certificate if the
4 Council finds that the facility has been retired according to the approved final
5 retirement plan.

6 17 OAR 345-027-0023(4): If the facility includes any transmission line under Council
7 jurisdiction:

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

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

15 18 OAR 345-027-0023(5): If the proposed energy facility is a pipeline or a transmission line
16 or has, as a related or supporting facility, a pipeline or transmission line, the Council
17 shall specify an approved corridor in the site certificate and shall allow the certificate
18 holder to construct the pipeline or transmission line anywhere within the corridor,
19 subject to the conditions of the site certificate. If the applicant has analyzed more than
20 one corridor in its application for a site certificate, the Council may, subject to the
21 Council's standards, approve more than one corridor.

22 19 OAR 345-027-0028: The following general monitoring conditions apply:

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

30 (b) The certificate holder shall implement the approved monitoring programs
31 described in section (a) and monitoring programs required by permitting agencies and
32 local governments.

33 (c) For each monitoring program described in sections (1) and (2), the certificate
34 holder shall have quality assurance measures approved by the Department before
35 beginning construction or, as appropriate, before beginning commercial operation.

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

1 20 OAR 345-026-0048: Following receipt of a site certificate or an amended site certificate,
2 the certificate holder shall implement a plan that verifies compliance with all site
3 certificate terms and conditions and applicable statutes and rules. As a part of the
4 compliance plan, to verify compliance with the requirement to begin construction by
5 the date specified in the site certificate, the certificate holder shall report promptly to
6 the Department of Energy when construction begins. Construction is defined in OAR
7 345-001-0010. In reporting the beginning of construction, the certificate holder shall
8 describe all work on the site performed before beginning construction, including work
9 performed before the Council issued the site certificate, and shall state the cost of that
10 work. For the purpose of this exhibit, "work on the site" means any work within a site or
11 corridor, other than surveying, exploration or other activities to define or characterize
12 the site or corridor. The certificate holder shall document the compliance plan and
13 maintain it for inspection by the Department or the Council.

14 21 OAR 345-026-0080: The certificate holder shall report according to the following
15 requirements:

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

18 (i) Within six months after beginning construction, and every six months
19 thereafter during construction of the energy facility and related or supporting facilities,
20 the certificate holder shall submit a semiannual construction progress report to the
21 Department of Energy. In each construction progress report, the certificate holder
22 shall describe any significant changes to major milestones for construction. The
23 certificate holder shall include such information related to construction as specified in
24 the site certificate. When the reporting date coincides, the certificate holder may
25 include the construction progress report within the annual report described in this
26 rule.

27 (ii) By April 30 of each year after beginning construction, the certificate holder
28 shall submit an annual report to the Department addressing the subjects listed in this
29 rule. The Council Secretary and the certificate holder may, by mutual agreement,
30 change the reporting date.

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

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

37 (i) Facility Status: An overview of site conditions, the status of facilities under
38 construction and a summary of the operating experience of facilities that are in
39 operation. In this section of the annual report, the certificate holder shall describe any
40 unusual events, such as earthquakes, extraordinary windstorms, major accidents or

1 the like that occurred during the year and that had a significant adverse impact on the
2 facility.

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

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

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

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

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

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

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

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

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

35 22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange
36 copies of all correspondence or summaries of correspondence related to compliance
37 with statutes, rules and local ordinances on which the Council determined compliance,
38 except for material withheld from public disclosure under state or federal law or under
39 Council rules. The certificate holder may submit abstracts of reports in place of full

1 reports; however, the certificate holder shall provide full copies of abstracted reports
2 and any summarized correspondence at the request of the Department.

3 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within
4 72 hours of any occurrence involving the facility if:

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

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

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

V. SPECIFIC FACILITY CONDITIONS

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

1. Certificate Administration Conditions

20 24 ~~The certificate holder shall request an amendment of the site certificate if the LJ North~~
21 ~~components are built or operated as part of the Pebble Springs Wind Project under the~~
22 ~~authority of a Gilliam County Conditional Use Permit. [Condition deleted by~~
23 ~~Amendment #2 (LJF)]~~

24 25 The certificate holder shall begin construction of the facility by September 24, 2010.
25 Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council
26 Chair and the applicant. The Council may grant an extension of the deadline to begin
27 construction in accordance with OAR 345-027-0030 or any successor rule in effect at the
28 time the request for extension is submitted. [Amendment #1 (LJF)]

29 26 The certificate holder shall complete construction of the facility by September 24, 2013.
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
35 extension of the deadline for completing construction in accordance with OAR 345-027-

1 0030 or any successor rule in effect at the time the request for extension is submitted.
2 [Amendment #1 (LJF)]

- 3 27 The certificate holder shall construct a facility substantially as described in the site
4 certificate and may select turbines of any type, subject to the following restrictions:
5 (a) The total number of turbines at the facility must not exceed 80 ~~127~~ turbines.
6 (b) The peak generating capacity of each turbine must not exceed 3.0 megawatts.
7 (c) The combined peak generating capacity of the facility must not exceed 153 ~~277~~
8 megawatts.
9 (d) The turbine hub height must not exceed 100 meters, and the turbine blade tip
10 height must not exceed 150 meters.
11 (e) The minimum blade tip clearance must be 30 meters above ground.
12 (f) The certificate holder shall request an amendment of the site certificate to
13 increase the combined peak generating capacity of the facility or to increase the
14 number of wind turbines or the dimensions of wind turbines at the facility.

15 [Amendment #2 (LJF)]

16 28 The certificate holder shall obtain all necessary federal, state and local permits or
17 approvals required for construction, operation and retirement of the facility or ensure
18 that its contractors obtain the necessary federal, state and local permits or approvals.

19 29 Before beginning construction, the certificate holder shall notify the Department in
20 advance of any work on the site that does not meet the definition of "construction" in
21 OAR 345-001-0010 or ORS 469.300 and shall provide to the Department a description of
22 the work and evidence that its value is less than \$250,000.

23 30 ~~{Before beginning construction of the LJIA components as described in the Final Order~~
24 ~~on Amendment #1, the certificate holder shall submit to the State of Oregon through~~
25 ~~the Council a bond or letter of credit in the amount described herein naming the State~~
26 ~~of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond~~
27 ~~or letter of credit amount is \$8.847 million (in 2006 dollars), adjusted to the date of~~
28 ~~issuance as described in (b), or the amount determined as described in (a). The~~
29 ~~certificate holder shall adjust the amount of the bond or letter of credit on an annual~~
30 ~~basis thereafter as described in (b).~~

31 ~~The certificate holder may adjust the amount of the bond or letter of credit based on~~
32 ~~the final design configuration of the LJIA components by applying the unit costs and~~
33 ~~general costs illustrated in Table 2 and Table 3 of the Final Order on the Application~~
34 ~~to the final design and calculating the financial assurance amount as described in that~~
35 ~~order, adjusted to the date of issuance as described in (b) and subject to approval by~~
36 ~~the Department.~~

37 ~~(a) The certificate holder shall adjust the amount of the bond or letter of credit,~~
38 ~~using the following calculation and subject to approval by the Department:~~

1 ~~(i) Adjust the Subtotal component of the bond or letter of credit amount~~
2 ~~(expressed in 2006 dollars) to present value, using the U.S. Gross Domestic Product~~
3 ~~Implicit Price Deflator, Chain Weight, as published in the Oregon Department of~~
4 ~~Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor~~
5 ~~agency (the "Index") and using the annual average index value for 2006 dollars and the~~
6 ~~quarterly index value for the date of issuance of the new bond or letter of credit. If at~~
7 ~~any time the Index is no longer published, the Council shall select a comparable~~
8 ~~calculation to adjust 2006 dollars to present value.~~

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

11 ~~(iii) Add 10 percent of the adjusted Gross Cost for the adjusted administration~~
12 ~~and project management costs and 10 percent of the adjusted Gross Cost for the~~
13 ~~adjusted future developments contingency.~~

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

17 ~~(b) The certificate holder shall use a form of bond or letter of credit approved by~~
18 ~~the Council.~~

19 ~~(c) The certificate holder shall use an issuer of the bond or letter of credit approved~~
20 ~~by the Council.~~

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

23 ~~The bond or letter of credit shall not be subject to revocation or reduction before~~
24 ~~retirement of the facility site.~~

25 ~~[Amendment #1] **Condition deleted by Amendment #2 (LIF)**].~~

26 31 If the certificate holder elects to use a bond to meet the requirements of Condition 30
27 or Condition 101, the certificate holder shall ensure that the surety is obligated to
28 comply with the requirements of applicable statutes, Council rules and this site
29 certificate when the surety exercises any legal or contractual right it may have to
30 assume construction, operation or retirement of the energy facility. The certificate
31 holder shall also ensure that the surety is obligated to notify the Council that it is
32 exercising such rights and to obtain any Council approvals required by applicable
33 statutes, Council rules and this site certificate before the surety commences any activity
34 to complete construction, operate or retire the energy facility. [Amendment #1]

35 32 Before beginning construction, the certificate holder shall notify the Department of the
36 identity and qualifications of major construction contractor(s) for specific portions of the
37 work. The certificate holder shall select contractors that have substantial experience in
38 the design and construction of similar facilities. The certificate holder shall report to the
39 Department any change of major construction contractors.

1 33 The certificate holder shall contractually require all construction contractors and
2 subcontractors involved in the construction of the facility to comply with all applicable
3 laws and regulations and with the terms and conditions of the site certificate. Such
4 contractual provisions shall not operate to relieve the certificate holder of responsibility
5 under the site certificate.

6 34 During construction, the certificate holder shall have an on-site assistant construction
7 manager who is qualified in environmental compliance to ensure compliance with all
8 construction-related site certificate conditions. During operation, the certificate holder
9 shall have a project manager who is qualified in environmental compliance to ensure
10 compliance with all ongoing site certificate conditions. The certificate holder shall notify
11 the Department of the name, telephone number, fax number and e-mail address of
12 these managers and shall keep the Department informed of any change in this
13 information.

14 35 Within 72 hours after discovery of conditions or circumstances that may violate the
15 terms or conditions of the site certificate, the certificate holder shall report the
16 conditions or circumstances to the Department.

2. Land Use Conditions

17 2. The certificate holder shall cooperate with the Gilliam County Road
18 Department to ensure that any unusual damage or wear to county
19 roads that is caused by construction of the facility is repaired by
20 the certificate holder. Upon completion of construction, the
21 certificate holder shall restore county roads to pre-construction
22 condition or better, to the satisfaction of the County Road
23 Department.

24 37 During construction, the certificate holder shall implement measures to reduce traffic
25 impacts, including:

26 (a) Providing notice to adjacent landowners when heavy construction traffic is
27 anticipated.

28 (b) Providing appropriate traffic safety signage and warnings.

29 (c) Requiring flaggers to be at appropriate locations at appropriate times during
30 construction to direct traffic reduce accident risks.

31 (d) Using traffic diversion equipment (such as advanced signage and pilot cars)
32 when slow or oversize construction loads are anticipated.

33 (e) Maintaining at least one travel lane at all times to the extent reasonably
34 possible so that roads will not be closed to traffic because of construction vehicles.

35 [Amendment #1 (UF)]

36 (f) Encouraging carpooling for the construction workforce.

1 (g) Including traffic control procedures in contract specifications for construction of
2 the facility.

3 (h) Keeping the access from Highway 19 free of gravel that tracks out onto the
4 highway.

5 **38** The certificate holder shall ensure that no equipment or machinery is parked or stored
6 on any county road except while in use.

7 **39** The certificate holder shall construct all facility components in compliance with the
8 following setback requirements:

9 (a) All facility components must be at least 3,520 feet from the property line of
10 properties zoned residential use or designated in the Gilliam County Comprehensive
11 Plan as residential.

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

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

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

22 (e) The certificate holder shall maintain a minimum distance of 250 feet measured
23 from the center line of each turbine tower to the nearest edge of any railroad right-of-
24 way or electrical substation.

25 (f) The certificate holder shall maintain a minimum distance of 250 feet measured
26 from the center line of each meteorological tower to the nearest edge of any public
27 road right-of-way or railroad right-of-way, nearest boundary of the certificate holder's
28 lease area or nearest electrical substation.

29 (g) The certificate holder shall maintain a minimum distance of 50 feet measured
30 from any facility O&M building to the nearest edge of any public road right-of-way or
31 railroad right-of-way or the nearest boundary of the certificate holder's lease area.

32 (h) The certificate holder shall maintain a minimum distance of 50 feet measured
33 from any substation to the nearest edge of any public road right-of-way or railroad
34 right-of-way or the nearest boundary of the certificate holder's electrical substation
35 easement or, if there is no easement, the nearest boundary of the certificate holder's
36 lease area.

37 **[Amendment #1(LF)]**

38 **40** The certificate holder shall consult with area landowners and lessees during
39 construction and operation of the facility and shall implement measures to reduce or

1 avoid any adverse impacts to farm practices on surrounding lands and to avoid any
2 increase in farming costs.

3 41 The certificate holder shall locate access roads and temporary construction laydown and
4 staging areas to minimize disturbance with farming practices and, wherever feasible,
5 shall place turbines and transmission interconnection lines along the margins of
6 cultivated areas to reduce the potential for conflict with farm operations.

7 42 Before beginning construction of any phase of the facility, the certificate holder shall
8 record in the real property records of Gilliam County a Covenant Not to Sue with regard
9 to generally accepted farming practices on farmland adjacent to the construction area
10 consistent with Gilliam County Zoning Ordinance 7.020(T)(4)(a)(5). [Amendment #1
11 (LJF)]

12 43 The certificate holder shall install lockable gates at the substation and on private access
13 roads.

14 44 Within 90 days after beginning operation of any phase of the facility, the certificate
15 holder shall provide to the Department and to the Gilliam County Planning Director
16 the actual latitude and longitude location or Stateplane NA D 83(91) coordinates of
17 each turbine tower, connecting line and transmission line built in that phase. In
18 addition, the certificate holder shall provide to the Department and to the Gilliam
19 County Planning Director, a summary of as-built changes in the facility compared to
20 the original plan, if any. [Amendment #1 (LJF)]

3. Cultural Resource Conditions

21 45 ~~Before beginning construction of the LIIA components as described in the *Final Order*
22 *on Amendment #1*, the certificate holder shall provide to the Department a map
23 showing the final design locations of all LIIA components and areas that would be
24 disturbed during their construction and also showing the LIIA areas that were surveyed
25 in 2004, 2005 and 2006 for cultural resources as described in the site certificate
26 application. If areas to be disturbed during construction lie outside of the surveyed
27 areas, the certificate holder shall hire qualified personnel to conduct field investigation
28 of those areas. The certificate holder shall provide a written report of the field
29 investigation to the Department and to the State Historic Preservation Office (SHPO). If
30 any historic, cultural or archaeological resources are found during the field investigation,
31 the certificate holder shall ensure that construction and operation of the facility will
32 have no impact on the resources. The certificate holder shall instruct all construction
33 personnel to avoid the areas where resources were identified in the 2004-2006 surveys
34 or were found during pre-construction investigations and shall implement other
35 appropriate measures to protect the resources. [Condition deleted by Amendment #2
36 (LJF)]~~

- 1 46 The certificate holder shall ensure that a qualified person instructs construction
2 personnel in the identification of cultural materials and avoidance of accidental damage
3 to identified resource sites.
- 4 47 The certificate holder shall ensure that construction personnel cease all ground-
5 disturbing activities in the immediate area if any archaeological or cultural resources are
6 found during construction of the facility until a qualified archaeologist can evaluate the
7 significance of the find. The certificate holder shall notify the Department and the State
8 Historic Preservation Office (SHPO) of the find. If the archaeologist determines that the
9 resource is significant, the certificate holder shall make recommendations to the Council
10 for mitigation, including avoidance or data recovery, in consultation with the
11 Department, SHPO and other appropriate parties. The certificate holder shall not restart
12 work in the affected area until the certificate holder has demonstrated to the
13 Department that it has complied with the archaeological permit requirements
14 administered by SHPO.
- 15 48 ~~During construction of the LJIA components as described in the *Final Order on*~~
16 ~~*Amendment #1*, the certificate holder shall label all identified historic, cultural or~~
17 ~~archaeological resource sites on construction maps and drawings as “no entry” areas,~~
18 ~~and if construction activities will occur within 200 feet of an identified site, the~~
19 ~~certificate holder shall flag a 50-foot buffer around the site. During construction of the~~
20 ~~LJIB components, the certificate holder shall label the site identified as LJ-4/10/09-8 in~~
21 ~~the Request for Amendment #1 for LJF on construction maps and drawings as a “no~~
22 ~~entry” area, and if construction will occur within 200 feet of the site, the certificate~~
23 ~~holder shall flag a 50-foot buffer around the site. [Amendment #2 (LJF)]~~

4. Geotechnical Conditions

- 24 49 Before beginning construction of any phase of the facility, the certificate holder shall
25 conduct site-specific geotechnical investigation of that phase and shall report its findings
26 to the Oregon Department of Geology & Mineral Industries (DOGAMI). The certificate
27 holder shall conduct the geotechnical investigation after consultation with DOGAMI and
28 in general accordance with DOGAMI open file report 00-04 “Guidelines for Engineering
29 Geologic Reports and Site-Specific Seismic Hazard Reports.” [Amendment #2 (LJF)]
- 30 50 The certificate holder shall design and construct the facility in accordance with
31 requirements set forth by the State of Oregon’s Building Code Division and any other
32 applicable codes and design procedures. The certificate holder shall design all
33 components of the facility to meet or exceed the minimum standards required by the
34 2003 International Building Code.
- 35 51 The certificate holder shall design, engineer and construct the facility to avoid dangers
36 to human safety presented by non-seismic hazards. As used in this condition, “non-
37 seismic hazards” include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

- 1 52 The certificate holder shall notify the Department within 72 hours of any accidents
2 including mechanical failures on the site associated with construction or operation of
3 the facility that may result in public health and safety concerns.
- 4 53 Before beginning construction of any phase of the facility, the certificate holder shall
5 submit Notices of Proposed Construction or Alteration to the Federal Aviation
6 Administration (FAA) and the Oregon Department of Aviation identifying the proposed
7 final locations of the turbines and related or supporting facilities in that phase of
8 construction. The certificate holder shall promptly notify the Department of the
9 responses from the FAA and the Oregon Department of Aviation. [Amendment #1 (UF)]
- 10 54 To protect the public from electrical hazards, the certificate holder shall enclose the
11 facility substations with appropriate fencing and locked gates.
- 12 55 The certificate holder shall construct turbine towers that are smooth steel structures
13 with no exterior ladders or access to the turbine blades and shall install locked access
14 doors accessible only to authorized personnel.
- 15 56 The certificate holder shall follow manufacturers' recommended handling instructions
16 and procedures to prevent damage to towers or blades that could lead to failure.
- 17 57 The certificate holder shall have an operational safety monitoring program and shall
18 inspect turbine blades on a regular basis for signs of wear. The certificate holder shall
19 repair turbine blades as necessary to protect public safety.
- 20 58 The certificate holder shall install and maintain self-monitoring devices on each turbine,
21 linked to sensors at the operations and maintenance building, to alert operators to
22 potentially dangerous conditions, and the certificate holder shall immediately remedy
23 any dangerous conditions. The certificate holder shall maintain automatic equipment
24 protection features in each turbine that would shut down the turbine and reduce the
25 chance of a mechanical problem causing a fire.
- 26 59 The certificate holder shall install generator step-up transformers at the base of each
27 tower in locked cabinets designed to protect the public from electrical hazards and shall
28 design the cabinets to avoid creation of artificial habitat for raptor prey.
- 29 60 The certificate holder shall construct turbines on concrete pads with a minimum of 10
30 feet of non-flammable and non-erosive ground cover on all sides. The certificate holder
31 shall cover turbine pad areas with non-erosive material immediately following exposure
32 during construction and shall maintain the pad area covering during operation of the
33 facility.
- 34 61 During construction and operation of the facility, the certificate holder shall develop and
35 implement fire safety plans in consultation with the North Gilliam County Rural Fire
36 Protection District and the Arlington Fire Department to minimize the risk of fire and to

- 1 respond appropriately to any fires that occur on the facility site. In developing the fire
2 safety plans, the certificate holder should take into account the dry nature of the region
3 and should address risks on a seasonal basis. The certificate holder shall meet annually
4 with District and Fire Department personnel to discuss emergency planning and shall
5 invite District and Fire Department personnel to observe any emergency drill or tower
6 rescue training conducted at the facility.
- 7 62 During construction and operation of the facility, the certificate holder shall ensure that
8 the O&M buildings and all service vehicles are equipped with shovels and portable fire
9 extinguishers of a 4A50BC or equivalent rating.
- 10 63 During construction, the certificate holder shall ensure that construction vehicles and
11 equipment are operated on graveled areas to the extent possible and that open flames,
12 such as cutting torches, are kept away from dry grass areas.
- 13 64 Upon the beginning of operation of the facility, the certificate holder shall provide to
14 North Gilliam County Rural Fire Protection District and the Arlington Fire Department a
15 site plan indicating the identification number assigned to each turbine and the location
16 of all facility structures. During operation, the certificate holder will ensure that
17 appropriate District and Fire Department personnel have an up-to-date list of the names
18 and telephone numbers of facility personnel available to respond on a 24-hour basis in
19 case of an emergency on the facility site.
- 20 65 During operation, the certificate holder shall ensure that all on-site employees receive
21 annual fire prevention and response training, including tower rescue training, by
22 qualified instructors or members of the local fire department and that all employees are
23 instructed to keep vehicles on roads and off dry grassland, except when off-road
24 operation is required for emergency purposes.
- 25 66 During construction, the certificate holder shall require that all on-site construction
26 contractors develop and implement a site health and safety plan that informs workers
27 and others on-site what to do in case of an emergency and that includes the locations of
28 fire extinguishers and nearby hospitals, important telephone numbers and first aid
29 techniques. The certificate holder shall ensure that construction contractors have
30 personnel on-site who are trained and equipped for tower rescue and who are first aid
31 and CPR certified.
- 32 67 During operation, the certificate holder shall develop and implement a site health and
33 safety plan that informs employees and others on-site what to do in case of an
34 emergency and that includes the locations of fire extinguishers and nearby hospitals,
35 important telephone numbers and first aid techniques.
- 36 68 The certificate holder shall handle any hazardous materials used on the site in a manner
37 that protects public health, safety and the environment and shall comply with all
38 applicable local, state and federal environmental laws and regulations.

1 69 If a reportable spill or release of hazardous materials occurs during construction or
2 operation of the facility, the certificate holder shall notify the Department within 72
3 hours and shall clean up the spill or release and dispose of any contaminated soil or
4 other materials according to applicable regulations. The certificate holder shall make
5 sure that spill kits containing items such as absorbent pads are located on equipment
6 and storage facilities to respond to accidental spills and shall instruct employees
7 handling hazardous materials in the proper handling, storage and cleanup of these
8 materials.

6. Water, Soils, Streams & Wetlands Conditions

9 70 The certificate holder shall conduct all construction work in compliance with an Erosion
10 and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of
11 Environmental Quality and as required under the National Pollutant Discharge
12 Elimination System (NPDES) Storm Water Discharge General Permit #1200-C. The
13 certificate holder shall include in the ESCP any procedures necessary to meet local
14 erosion and sediment control requirements and storm water management
15 requirements.

16 71 During construction, the certificate holder shall limit truck traffic to designated existing
17 and improved road surfaces to avoid soil compaction, to the extent possible.

18 72 During construction, the certificate holder shall avoid impacts to waters of the state in
19 the following manner:

20 ~~(a) The certificate holder shall avoid any disturbance, including the placement of~~
21 ~~piles for the collector line, within 25 feet of the stream channel in the area identified as~~
22 ~~"S5" on Figure J-1 of the Site Certificate Application. [Condition deleted by Amendment~~
23 ~~#1 (LJF)]~~

24 ~~(b) The certificate holder shall avoid any disturbance to the six wetland areas~~
25 ~~identified as "W1" through "W6" on Figure J-1 of the Site Certificate Application and~~
26 ~~wetland area identified as "W-8" in the Request for Amendment #1for LJF, Attachment~~
27 ~~11, Figure 6. [Amendment #2 (LJF)].~~

28 ~~(c) The certificate holder shall avoid any disturbance to the stream channels~~
29 ~~identified as "S24" and S25" on Figure J-1 of the site Certificate Application. [Condition~~
30 ~~deleted by Amendment #2 (LJF)]~~

31 ~~(d) Before beginning construction affecting the location identified as "S27" on~~
32 ~~Figure J-1 of the Site Certificate Application, the certificate holder shall apply for and~~
33 ~~obtain a Removal/Fill Permit from the Department of State Lands, which, in accordance~~
34 ~~with ORS 469.401, shall issue the permit substantially in the form of Attachment F of~~
35 ~~the Final Order on the Application and subject only to the conditions of this site~~
36 ~~certificate including substantive requirements listed in that attachment. [Condition~~
37 ~~deleted by Amendment #2 (LJF)]~~

1 (e) Before beginning construction of any phase of the facility, the certificate holder
2 shall determine whether any construction disturbance in that phase would occur in
3 locations not previously investigated for potential jurisdictional waters as described in
4 the Final Orders on the Application and Amendment #1 for UJ. The certificate holder
5 shall conduct pre-construction investigations to determine whether any jurisdictional
6 waters exist in those locations. The certificate holder shall submit a written report on
7 the pre-construction investigation to the Department of Energy and to the Department
8 of State Lands for approval before beginning construction of any phase of the facility
9 and shall ensure that construction of that phase would have no impact on any
10 jurisdictional water identified in the report. [Amendment #2 (UJ)]

11 73 During construction, the certificate holder shall ensure that the wash down of concrete
12 trucks occurs only at a contractor-owned batch plant or at tower foundation locations. If
13 such wash down occurs at tower foundation locations, then the certificate holder shall
14 ensure that wash down wastewater does not run off the construction site into
15 otherwise undisturbed areas and that the wastewater is disposed of on backfill piles and
16 buried underground with the backfill over the tower foundation.

17 74 The certificate holder shall restore areas outside the permanent footprint that are
18 disturbed during construction according to the methods and monitoring procedures
19 described in the *Revegetation Plan* that is incorporated in the *Final Order on*
20 *Amendment #2 for UJ* as Attachment F and as amended from time to time.
21 [Amendment #2 (UJ)]

22 75 During facility operation, the certificate holder shall routinely inspect and maintain all
23 roads, pads and trenched areas and, as necessary, maintain or repair erosion control
24 measures. The certificate holder shall restore areas that are temporarily disturbed
25 during facility maintenance or repair activities to pre-disturbance condition or better.

26 76 During facility operation, the certificate holder shall obtain water for on-site uses from
27 one or more on-site wells, subject to compliance with any applicable permit
28 requirements, not exceeding 5,000 gallons per day. The certificate holder shall not
29 change the source of water for on-site uses without prior Department approval.

30 77 During facility operation, if blade-washing becomes necessary, the certificate holder
31 shall ensure that there is no runoff of wash water from the site or discharges to surface
32 waters, storm sewers or dry wells. The certificate holder shall not use more than 50
33 gallons of water per blade and shall not wash more than eight turbines (24 blades) per
34 week. The certificate holder shall not use acids, bases or metal brighteners with the
35 wash water. The certificate may use biodegradable, phosphate-free cleaners sparingly.

7. Transmission Line & EMF Conditions

36 78 The certificate holder shall install the 34.5-kV collector system underground to the
37 extent practical. The certificate holder shall install underground segments of the
38 collector system at a minimum depth of three feet. Where geotechnical conditions or

1 other engineering considerations require, the certificate holder may install segments of
2 the collector system aboveground, but the total length of aboveground segments must
3 not exceed 30 percent of the collector system, ~~excluding the optional parallel double-~~
4 ~~circuit 34.5 kV lines that may be built to carry power from the LIIIB area to the LIIIA~~
5 ~~substations as described in the Final Order on Amendment #1.~~ The certificate holder
6 shall construct aboveground segments of the collector system using single or double
7 circuit monopole design as described in the site certificate application. [Amendment #2
8 (UF)]

9 79 At least 30 days before beginning preparation of detailed design and specifications for
10 the electrical transmission lines, the certificate holder shall consult with the Oregon
11 Public Utility Commission staff to ensure that transmission line designs and
12 specifications are consistent with applicable codes and standards.

13 80 To protect public safety, the certificate holder shall design and maintain the
14 transmission lines so that:

15 (a) Alternating current electric fields during operation do not exceed 9 kV per meter
16 at one meter above the ground surface in areas accessible to the public.

17 (b) Induced voltages during operation are as low as reasonably achievable.

18 81 The certificate holder shall take reasonable steps to reduce or manage human exposure
19 to electromagnetic fields, including but not limited to:

20 (a) Constructing all aboveground transmission lines at least 200 feet from any
21 residence or other occupied structure.

22 (b) Ensuring that the area near the facility substation is inaccessible to the public by
23 fencing the area.

24 (c) Constructing aboveground 34.5-kV transmission lines with a minimum clearance
25 of 25 feet from the ground.

26 (d) Constructing all aboveground 230-kV transmission lines with a minimum
27 clearance of 30 feet from the ground.

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

30 [Amendment #1 (UF)]

8. Plants, Wildlife & Habitat Protection Conditions

31 82 During construction and operation of the facility, the certificate holder shall implement
32 a plan to control the introduction and spread of noxious weeds. The certificate shall
33 develop the weed control plan in consultation with the Gilliam County Weed Control
34 Board.

35 83 The certificate holder shall design all aboveground transmission line support structures
36 following the practices suggested by the Avian Powerline Interaction Committee (2006)

1 and shall install anti-perching devices on transmission pole tops and cross arms where
2 the poles are located within ½ mile of turbines. [Amendment #1 (LJF)]

3 **84** The certificate holder may construct turbines and other facility components within the
4 site boundary as described in the Final Orders on the Application and Amendment #1
5 for LJF, subject to the following requirements addressing potential habitat impact:

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

8 (b) The certificate holder shall design and construct facility components that are the
9 minimum size needed for safe operation of the energy facility.

10 (c) In the final design of the facility within micro-siting areas, the certificate holder
11 shall reduce impact on essential or important habitat (Category 4 and above) to the
12 extent practical.

13 (d) As a protective measure during construction, the certificate holder shall install
14 exclusion fencing around confirmed populations of Laurent's milk-vetch (identified in
15 the Request for Amendment #1 for LJF, Attachment 7, p. 13) and sessile mousetail
16 (identified in Figure Q-3 of the site certificate application and Request for Amendment
17 #1 for LJF, Attachment 7, p. 14). The certificate holder shall not install facility
18 components or cause temporary disturbance within these areas. Before beginning
19 construction, the certificate holder shall verify the protected status of sessile mousetail
20 and notify the Department. If the species has been upgraded to threatened or
21 endangered under State or federal law, the certificate holder shall take appropriate
22 mitigation actions, subject to Department approval.

23 (e) If construction would affect locations within the micro-siting areas that were not
24 previously surveyed for the occurrence of State or federal threatened or endangered
25 species as described in the Final Orders on the Application and Amendment #1 for LJF,
26 the certificate holder shall conduct additional pre-construction surveys of those
27 locations, notify the Department of the findings and implement appropriate avoidance
28 or mitigation measures for any threatened or endangered species detected, subject to
29 Department approval.

30 [Amendment #2 (LJF)]

31 **85** The certificate holder shall implement measures to mitigate impacts to sensitive wildlife
32 habitat during construction and operation including, but not limited to, the following:

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

35 (b) Before beginning construction of any phase of the facility, the certificate holder
36 shall have a qualified biologist place exclusion markers around sensitive wildlife habitat
37 areas for that phase of construction, including Category 1 Washington ground squirrel
38 (WGS) areas and an appropriate buffer around these areas. The certificate holder shall
39 maintain the exclusion markings until that phase of construction has been completed.

1 (c) Ensuring that a qualified person instructs construction and operations
2 personnel to be aware of wildlife in the area and to take precautions to avoid injuring
3 or destroying wildlife or sensitive wildlife habitat.

4 (d) Avoiding unnecessary road construction, temporary disturbance and vehicle
5 use. Posting and maintaining speed limit signs (not to exceed 20 miles per hour) on
6 access roads throughout the site. The certificate holder shall ensure that all
7 construction and operations personnel are instructed to observe caution when driving
8 in the facility area to avoid injury or disturbance to wildlife enforce and for personal
9 safety.

10 [Amendment #1 (UF)]

11 86 During construction of any phase of the facility, the certificate holder shall protect the
12 area within a 1300-foot buffer around active nests of the following species during the
13 sensitive period, as provided in this condition:

<u>Species</u>	<u>Sensitive Period</u>	<u>Early Release Date</u>
Swainson's hawk		April 1 to August 15 May 31
Ferruginous hawk		March 15 to August 15 May 31
Burrowing owl		April 1 to August 15 July 15

14 During the year in which construction of any phase of the facility occurs, the certificate
15 holder shall use a protocol approved by the Oregon Department of Fish and Wildlife
16 (ODFW) to determine whether there are any active nests of these species within a half-
17 mile of any areas that would be disturbed during construction of that phase. If a nest is
18 occupied by any of these species after the beginning of the sensitive period, the
19 certificate holder shall not engage in high-impact construction activities (activities that
20 involve blasting, grading or other major ground disturbance) or allow high levels of
21 construction traffic within 1300 feet of the nest site. In addition, the certificate holder
22 will flag the boundaries of the 1300-foot buffer area and shall instruct construction
23 personnel to avoid any unnecessary activity within the buffer area. The certificate
24 holder shall hire an independent biological monitor to observe the active nest sites
25 during the sensitive period for signs of disturbance and to notify the Department of any
26 non-compliance with this condition. If the monitor observes nest site abandonment or
27 other adverse impact to nesting activity, the certificate holder shall implement
28 appropriate mitigation, in consultation with ODFW and subject to the approval of the
29 Department, unless the adverse impact is clearly shown to have a cause other than
30 construction activity. The certificate holder may begin or resume high-impact
31 construction activities before the ending day of the sensitive period if any known nest
32 site is not occupied by the early release date. If a nest site is occupied, then the
33 certificate holder may begin or resume high-impact construction before the ending day

1 of the sensitive period with the approval of ODFW, after the young are fledged. The
2 certificate holder shall use a protocol approved by ODFW to determine when the young
3 are fledged (the young are independent of the core nest site).

4 [Amendment #1 (LJF)]

5 87 The certificate holder shall conduct wildlife monitoring as described in the *Wildlife*
6 *Monitoring and Mitigation Plan* that is incorporated in the *Final Order on Amendment*
7 *#2 for LJF* as Attachment D and as amended from time to time. [Amendment #2 (LJF)]

8 88 ~~Before beginning construction of the LHA components as described in the *Final Order*~~
9 ~~on Amendment #1, the certificate holder shall obtain an Incidental Take Permit (ITP)~~
10 ~~letter from the Oregon Department of Fish and Wildlife (ODFW) that incorporates the~~
11 ~~terms and commitments of the ITP application as set forth in Attachment E of the *Final*~~
12 ~~*Order on the Application*. [Condition deleted by Amendment #2 (LJF)]~~

13 89 The certificate holder shall acquire the legal right to create, enhance, maintain and
14 protect a habitat mitigation area as long as the site certificate is in effect by means of an
15 outright purchase, conservation easement or similar conveyance and shall provide a
16 copy of the documentation to the Department. Within the habitat mitigation area, the
17 certificate holder shall improve the habitat quality as described in the *Habitat*
18 *Mitigation Plan* that is incorporated in the *Final Order on Amendment #2 for LJF* as
19 Attachment E and as amended from time to time. [Amendment #2 (LJF)]

9. Visual Effects Conditions

20 90 To reduce the visual impact of the facility, the certificate holder shall:

21 (a) Mount nacelles on smooth steel towers, painted uniformly in a neutral white
22 color.

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

25 (c) Not allow any advertising on any part of the facility.

26 (d) Use only those signs required for facility safety or required by law, except that
27 the certificate holder may erect a sign to identify the facility.

28 (e) Maintain any signs allowed under this condition in good repair.

29 91 The certificate holder shall design and construct the operation and maintenance
30 buildings to be generally consistent with the character of similar buildings used by
31 commercial farmers or ranchers in the area and shall paint the building in a neutral color
32 to blend with the surrounding landscape.

33 92 The certificate holder shall not use exterior lighting at the facility except:

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

1 (b) Security lighting at the operations and maintenance buildings and at the
2 substations, provided that such lighting is shielded or downward-directed to reduce
3 glare.

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

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

7 [Amendment #1 (UF)]

10. Noise Control Conditions

8 93 To reduce noise impacts at nearby residential areas, the certificate holder shall:

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

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

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

15 94 Before beginning construction of any phase of the facility, the certificate holder shall
16 provide to the Department:

17 (a) Information that identifies the final design locations of all turbines to be built in
18 that phase of construction.

19 (b) The maximum sound power level of the turbines and substation transformers
20 based on manufacturers' warranties or confirmed by other means acceptable to the
21 Department.

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

29 (d) For each noise-sensitive property where the certificate holder relies on a noise
30 waiver to demonstrate compliance in accordance with OAR 340-035-
31 0035(1)(b)(B)(iii)(III), a copy of the a legally effective easement or real covenant
32 pursuant to which the owner of the property authorizes the certificate holder's
33 operation of the facility to increase ambient statistical noise levels L_{10} and L_{50} by more
34 than 10 dBA at the appropriate measurement point. The legally-effective easement or
35 real covenant must: include a legal description of the burdened property (the noise
36 sensitive property); be recorded in the real property records of the county; expressly
37 benefit the certificate holder; expressly run with the land and bind all future owners,

1 lessees or holders of any interest in the burdened property; and not be subject to
2 revocation without the certificate holder's written approval.

3 **[Amendment #1 (LFI)]**

4 **95** 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
7 certificate holder to address those complaints.

11. Waste Management Conditions

8 **96** The certificate holder shall provide portable toilets for on-site sewage handling during
9 construction and shall ensure that they are pumped and cleaned regularly by a licensed
10 contractor who is qualified to pump and clean portable toilet facilities.

11 **97** During operation, the certificate holder shall discharge sanitary wastewater generated
12 at the O&M building to a licensed on-site septic system in compliance with county
13 permit requirements. The certificate holder shall design the septic system design with a
14 capacity that is less than 2,500 gallons per day.

15 **98** The certificate holder shall implement a waste management plan during construction
16 that includes but is not limited to the following measures:

17 (a) Training construction personnel to minimize and recycle solid waste.

18 (b) Minimizing the generation of wastes from construction through detailed
19 estimating of materials needs and through efficient construction practices.

20 (c) Recycling steel and other metal scrap.

21 (d) Recycling wood waste.

22 (e) Recycling packaging wastes such as paper and cardboard.

23 (f) Collecting non-recyclable waste for transport to a landfill by a licensed waste
24 hauler.

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

29 **99** The certificate holder may dispose of waste concrete on site with the permission of the
30 landowner and in accordance with OAR 340-093-0080 and other applicable regulations.
31 The certificate holder shall dispose of waste concrete on site by placing the material in
32 an excavated hole, covering it with at least three feet of topsoil and grading the area to
33 match existing contours. If the waste concrete is not disposed of on site, the certificate
34 holder shall arrange for proper disposal in a landfill.

35 **100** The certificate holder shall implement a waste management plan during operation that
36 includes but is not limited to the following measures:

- 1 (a) Training employees to minimize and recycle solid waste.
2 (b) Recycling paper products, metals, glass and plastics.
3 (c) Recycling used oil and hydraulic fluid.
4 (d) Collecting non-recyclable waste for transport to a landfill by a licensed waste
5 hauler.
6 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and
7 oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium
8 batteries for disposal by a licensed firm specializing in the proper recycling or disposal
9 of hazardous wastes.

10 **VI. CONDITIONS ADDED BY AMENDMENT #1 OF LUF**

11 **101** Before beginning construction of the LJIB components as described in the *Final Order*
12 *on Amendment #1 for LUF*, the certificate holder shall submit to the State of Oregon
13 through the Council a bond or letter of credit in the amount described herein naming
14 the State of Oregon, acting by and through the Council, as beneficiary or payee. The
15 initial bond or letter of credit amount is \$7.281 million (in 4th Quarter 2009 dollars),
16 adjusted to the date of issuance as described in (b), or the amount determined as
17 described in (a). The certificate holder shall adjust the amount of the bond or letter of
18 credit on an annual basis thereafter as described in (b).

19 (a) The certificate holder may adjust the amount of the bond or letter of credit
20 based on the final design configuration of the LJIB components by applying the unit
21 costs and general costs illustrated in Table 2 of the *Final Order on Amendment #1 for*
22 *LUF* to the final design and calculating the financial assurance amount as described in
23 that order, adjusted to the date of issuance as described in (b) and subject to approval
24 by the Department.

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

27 (i) Adjust the Subtotal component of the bond or letter of credit amount
28 (expressed in 4th Quarter 2009 dollars) to present value, using the U.S. Gross Domestic
29 Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department
30 of Administrative Services' "Oregon Economic and Revenue Forecast" or by any
31 successor agency (the "Index") and using the index value for 4th Quarter 2009 dollars
32 and the quarterly index value for the date of issuance of the new bond or letter of
33 credit. If at any time the Index is no longer published, the Council shall select a
34 comparable calculation to adjust 4th Quarter 2009 dollars to present value.

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

37 (iii) Add 10 percent of the adjusted Gross Cost for the adjusted administration
38 and project management costs and 10 percent of the adjusted Gross Cost for the
39 adjusted future developments contingency.

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

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

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

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

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

12 **[Amendment #2 (LJF)]**

13 102 Before beginning construction of the LJIB components as described in the *Final Order*
14 *on Amendment #1 for LJF*, the certificate holder shall provide to the Department a map
15 showing the final design locations of all LJIB components, the areas that would be
16 disturbed during construction and the areas that were surveyed in 2009 for historic,
17 cultural or archaeological resources as described in the Request for Amendment #1 for
18 LJF. If areas to be disturbed during construction lie outside of the previously surveyed
19 areas, the certificate holder shall hire qualified personnel to conduct field investigation
20 of those areas. The certificate holder shall provide a written report of the field
21 investigation to the Department and to the Oregon State Historic Preservation Office
22 (SHPO). If any potentially significant historic, cultural or archaeological resource sites are
23 found during the field investigation, the certificate holder shall ensure that construction
24 and operation of the facility will have no impact on the resources. The certificate holder
25 shall instruct all construction personnel to avoid the areas where resources were
26 identified in the 2009 surveys or were found during pre-construction investigations and
27 shall implement other appropriate measures to protect the resources.

28 **[Amendment #2 (LJF)]**

29 103 In reference to the approximate alignment of the Oregon Trail described in the Request
30 for Amendment #1 for LJF, the certificate holder shall comply with the following
31 requirements:

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

34 (b) The certificate holder shall not locate facility components on undeveloped land
35 where the trail alignment is marked by existing Oregon-California Trail Association
36 markers, as described in the Request for Amendment #1 for LJF.

37 (c) Before beginning construction of the LJIB components as described in the *Final*
38 *Order on Amendment #1 for LJF*, the certificate holder shall provide to the State

1 Historic Preservation Office (SHPO) and the Department photographic documentation
2 of the presumed Oregon Trail alignments within the site boundary.

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

10 **[Amendment #2 (LJF)]**

11 **104** Before beginning construction of any new State Highway approaches or utility crossing
12 authorized by the *Final Order on Amendment #1 for LJF*, the certificate holder shall
13 obtain all required permits from the Oregon Department of Transportation (ODOT)
14 subject to the applicable conditions required by OAR Chapter 734, Divisions 51 and 55.
15 The certificate holder shall submit the necessary application or applications in a form
16 satisfactory to ODOT and the Department for the location, construction and
17 maintenance of approaches to State Highway 19 for access to the site. The certificate
18 holder shall submit the necessary application or applications in a form satisfactory to
19 ODOT and the Department for the location, construction and maintenance of collector
20 cables or transmission lines crossing Highway 19.

21 **[Amendment #2 (LJF)]**

22 **VII. CONDITIONS ADDED BY AMENDMENT # 2 OF LJF**

23 **105 PGE must provide the Department a copy of the executed LJIB site certificate and**
24 **documentation of the asset purchase agreement within 7 days of closing.**

25 **VIII. SUCCESSORS AND ASSIGNS**

26 To transfer this site certificate or any portion thereof or to assign or dispose of it in
27 any other manner, directly or indirectly, the certificate holder shall comply with OAR 345-
28 027-0100.

IX. SEVERABILITY AND CONSTRUCTION

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

X. GOVERNING LAW AND FORUM

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

4 **XI. EXECUTION**

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

8 **IN WITNESS WHEREOF**, this site certificate has been executed by the State of Oregon, acting
9 by and through its Energy Facility Siting Council, and by Portland General Electric, Leaning
10 Juniper Wind Power II, LLC.

11

ENERGY FACILITY SITING COUNCIL

PORTLAND GENERAL ELECTRIC

By: _____

W. Bryan Wolfe, Chair

Oregon Energy Facility Siting Council

Date: _____

By: _____

Print: _____

Date: _____

and

By: _____

Print: _____

Date: _____

Attachment D

Leaning Juniper IIA Wind Project: Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 This plan describes wildlife monitoring that the certificate holder shall conduct during
2 operation of the Leaning Juniper IIA Wind Power Facility.⁸⁴ The monitoring objectives are to
3 determine whether the facility causes significant fatalities of birds and bats and to determine
4 whether the facility results in a loss of habitat quality.

5 Per Amendment 2 to Leaning Juniper II Wind Power Facility, the facility was divided
6 into two separate facilities with LJIIA and LJIIB each receiving its own site certificate. However,
7 the site certificate holders agreed to share mitigation and environmental responsibilities.
8 Therefore, the requirements for the facility as a whole, including both LJIIA and LJIIB, remain
9 in this Wildlife Monitoring and Mitigation Plan and each individual site certificate holder
10 remains bound by its terms.

11 The facility consists of up to 127 wind turbines, four non-guyed meteorological (met)
12 towers and other related or supporting facilities as described in the site certificate. The
13 permanent facility components occupy approximately 111 acres, of which up to 52 acres is
14 Category 5 wildlife habitat or better, based on the Oregon Department of Fish and Wildlife
15 (ODFW) standards (OAR 635-415-0025).⁸⁵

16 The certificate holder shall use experienced personnel to implement the monitoring
17 required under this plan and properly trained personnel to conduct the monitoring, subject to
18 approval by the Oregon Department of Energy (Department) as to professional qualifications.
19 For all components of this plan except the Wildlife Reporting and Handling System, the
20 certificate holder shall hire an independent third party (not employees of the certificate holder) to
21 perform monitoring tasks.

22 The Wildlife Monitoring and Mitigation Plan for the facility has the following
23 components:

- 24 2) Fatality monitoring program including:
- 25 a) Removal trials
 - 26 b) Searcher efficiency trials
 - 27 c) Fatality search protocol
 - 28 d) Statistical analysis
- 29 3) Raptor nesting surveys
- 30 4) Washington ground squirrel surveys
- 31 5) Grassland bird study
- 32 6) Wildlife Reporting and Handling System

⁸⁴ This plan is incorporated by reference in the site certificate for the LJI and must be understood in that context. It is not a "stand-alone" document. This plan does not contain all mitigation required of the certificate holder.

⁸⁵ A more complete description of the habitat areas affected by the each facility, LJIIA and LJIIB, is provided in the Final Order on Amendment #1, Section IV.4(b), which expanded the site boundary to include LJIIB

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 Based on the results of the monitoring programs, mitigation of significant impacts may be
2 required. The selection of the mitigation actions should allow for flexibility in creating
3 appropriate responses to monitoring results that cannot be known in advance. If the Department
4 determines that mitigation is needed, the certificate holder shall propose appropriate mitigation
5 actions to the Department and shall carry out mitigation actions approved by the Department,
6 subject to review by the Oregon Energy Facility Council (Council).

- 7 • **Fatality Monitoring**
- 8 • **Definitions and Methods**
- 9 • Seasons

10 This plan uses the following dates for defining seasons:

Season	Dates
Spring Migration	March 16 to May 15
Summer/Breeding	May 16 to August 15
Fall Migration	August 16 to October 31
Winter	November 1 to March 15

- 11 • Search Plots

12 The certificate holder shall conduct fatality monitoring within search plots. The
13 certificate holder, in consultation with the Oregon Department of Fish and Wildlife (ODFW),
14 shall select search plots based on a systematic sampling design that ensures that the selected
15 search plots are representative of the habitat conditions in different parts of the site. Each search
16 plot will contain one turbine. Search plots will be square or circular. Circular search plots will be
17 centered on the turbine location and will have a radius equal to the maximum blade tip height of
18 the turbine contained within the plot. "Maximum blade tip height" is the turbine hub-height plus
19 one-half the rotor diameter. Square search plots will be of sufficient size to contain a circular
20 search plot as described above. The certificate holder shall provide maps of the search plots to
21 the Department before beginning fatality monitoring at the facility. The certificate holder shall
22 use the same search plots for each search conducted during a monitoring year.

- 23 • Scheduling

24 In each monitoring year, the certificate holder shall conduct fatality monitoring searches
25 at the rates of frequency shown below. Over the course of one monitoring year, the certificate
26 holder would conduct 16 searches, as follows:

Season	Frequency
Spring Migration	2 searches per month (4 searches)
Summer/Breeding	1 search per month (3 searches)
Fall Migration	2 searches per month (5 searches)
Winter	1 search per month (4 searches)

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 • Sample Size

2 The sample size for fatality monitoring is the number of turbines searched per monitoring
3 year. During each monitoring year, the certificate holder shall search a minimum of 50 turbines.
4 If fewer than 50 turbines are built, the certificate holder shall search all turbines.

5 As described in the site certificate, the certificate holder may choose to build the LJF
6 using turbine types in two size classes:

- 7 • Small: turbines having a rotor diameter of 82 meters or less
- 8 • Large: turbines having a rotor diameter greater than 82 meters

9 If the final design of the facility includes both small and large turbines, the certificate
10 holder shall consult with an independent expert with experience in statistical analysis of avian
11 fatality data to determine whether it would be possible to design a 50-turbine sample with a
12 sufficient number of turbines in each size class to allow a statistical comparison of fatality rates
13 for all birds as a group. The certificate holder shall submit the expert's written analysis to the
14 Department. If the expert's analysis shows that a comparison study is possible and if the
15 Department approves, the certificate holder shall sample the appropriate number of turbines in
16 each class and conduct the comparison study. The certificate holder may choose to sample more
17 than 50 turbines in each monitoring year, if a larger sample size would allow the comparison
18 study to be done.

19 • Removal Trials

20 The objective of the removal trials is to estimate the length of time avian and bat
21 carcasses remain in the search area. Carcass removal studies will be conducted during each
22 season in the vicinity of the search plots. Estimates of carcass removal rates will be used to
23 adjust carcass counts for removal bias. "Carcass removal" is the disappearance of a carcass from
24 the search area due to predation, scavenging or other means such as farming activity. Removal
25 rates will be estimated by size class, habitat type and season.

26 The certificate holder shall conduct carcass removal trials within each of the seasons
27 defined above during the years in which fatality monitoring occurs. During the first year in
28 which fatality monitoring occurs, the certificate holder shall conduct one removal trial per season
29 (four removal trials per year). For each trial, at least 10 small bird carcasses and at least 10 large
30 bird carcasses will be distributed throughout the project area (approximately 80 trial carcasses
31 per year).

32 Before beginning removal trials for the second year of fatality monitoring, the certificate
33 holder shall report the results of the first year removal trials to the Department and ODFW. In the
34 report, the certificate holder shall analyze whether four removal trials per year, as described
35 above, provides sufficient data to accurately estimate adjustment factors for carcass removal. The
36 number of removal trials for the second year of fatality monitoring may be adjusted up or down,
37 subject to the approval of the Department.

38 The "small bird" size class will use carcasses of house sparrows, starlings, commercially
39 available game bird chicks or legally obtained native birds to simulate passerines. The "large
40 bird" size class will use carcasses of raptors provided by agencies, commercially available adult
41 game birds or cryptically colored chickens to simulate raptors, game birds and waterfowl. If
42 fresh bat carcasses are available, they may also be used.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 To avoid confusion with turbine-related fatalities, planted carcasses will not be placed in
2 fatality monitoring search plots. Planted carcasses will be placed in the vicinity of search plots
3 but not so near as to attract scavengers to the search plots. The planted carcasses will be located
4 randomly within the carcass removal trial plots.

5 Carcasses will be placed in a variety of postures to simulate a range of conditions. For
6 example, birds will be: 1) placed in an exposed posture (e.g., thrown over the shoulder), 2)
7 hidden to simulate a crippled bird (e.g., placed beneath a shrub or tuft of grass) or 3) partially
8 hidden. Trial carcasses will be marked discreetly for recognition by searchers and other
9 personnel. Trial carcasses will be left at the location until the end of the carcass removal trial.

10 It is expected that carcasses will be checked as follows, although actual intervals may
11 vary. Carcasses will be checked for a period of 40 days to determine removal rates. They will be
12 checked approximately every day for the first 4 days, and then on day 7, day 10, day 14, day 20,
13 day 30 and day 40. This schedule may vary depending on weather and coordination with the
14 other survey work. At the end of the 40-day period, the trial carcasses and scattered feathers will
15 be removed.

16 • Searcher Efficiency Trials

17 The objective of searcher efficiency trials is to estimate the percentage of bird and bat
18 fatalities that searchers are able to find. The certificate holder shall conduct searcher efficiency
19 trials on the fatality monitoring search plots in both grassland/shrub-steppe and cultivated
20 agriculture habitat types. Searcher efficiency will be estimated by size class, habitat type and
21 season. A pooled estimate of searcher efficiency will be used to adjust carcass counts for
22 detection bias.

23 The certificate holder shall conduct searcher efficiency trials within each of the seasons
24 defined above during the years in which the fatality monitoring occurs. During each season of
25 the years in which fatality monitoring occurs, the certificate holder shall use approximately 25
26 carcasses for searcher efficiency trials (approximately 100 carcasses per year). The certificate
27 holder shall vary the number of trials per season and the number of carcasses per trial so that the
28 searchers will not know the total number of trial carcasses being used in any trial. The certificate
29 holder shall distribute trial carcasses in varied habitat in rough proportion to the habitat types
30 within the facility site. During each season, both small bird and large bird carcasses will be used
31 in approximately equal numbers. "Small bird" and "large bird" size classes and carcass selection
32 are as described above for the removal trials.

33 Before beginning searcher efficiency trials for the second year of fatality monitoring, the
34 certificate holder shall report the results of the first year efficiency trials to the Department and
35 ODFW. In the report, the certificate holder shall analyze whether the efficiency trials as
36 described above (using approximately 100 carcasses per year) provides sufficient data to
37 accurately estimate adjustment factors for carcass removal. The number of removal trials for the
38 second year of fatality monitoring may be adjusted up or down, subject to the approval of the
39 Department.

40 Personnel conducting searches will not know in advance when trials are conducted; nor
41 will they know the location of the trial carcasses. If suitable trial carcasses are available, trials
42 during the fall season will include several small brown birds to simulate bat carcasses. Legally
43 obtained bat carcasses will be used if available.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 On the day of a standardized fatality monitoring search (described below) but before the
2 beginning of the search, efficiency trial carcasses will be placed at random locations within areas
3 to be searched. If scavengers appear attracted by placement of carcasses, the carcasses will be
4 distributed before dawn.

5 Efficiency trials will be spread over the entire season to incorporate effects of varying
6 weather and vegetation growth. Carcasses will be placed in a variety of postures to simulate a
7 range of conditions. For example, birds will be: 1) placed in an exposed posture (thrown over the
8 shoulder), 2) hidden to simulate a crippled bird or 3) partially hidden.

9 Each non-domestic carcass will be discreetly marked so that it can be identified as an
10 efficiency trial carcass after it is found. The number and location of the efficiency trial carcasses
11 found during the carcass search will be recorded. The number of efficiency trial carcasses
12 available for detection during each trial will be determined immediately after the trial by the
13 person responsible for distributing the carcasses.

14 If new searchers are brought into the search team, additional searcher efficiency trials
15 will be conducted to ensure that detection rates incorporate searcher differences. The certificate
16 holder shall include a discussion of any changes in search personnel and any additional detection
17 trials in the reporting required under Section □ of this plan.

18 • Fatality Monitoring Search Protocol

19 The objective fatality monitoring is to estimate the number of bird and bat fatalities that
20 are attributable to facility operation as an indicator of the impact of the facility on habitat quality.
21 The goal of bird and bat fatality monitoring is to estimate fatality rates and associated variances.
22 The certificate holder shall conduct fatality monitoring using standardized carcass searches. For
23 each phase of the facility, the certificate holder shall conduct fatality monitoring for two years
24 (32 searches), beginning one month after the start of commercial operation of that phase.

25 The certificate holder shall use a worst-case analysis to resolve any uncertainty in the
26 results and to determine whether the data indicate that additional mitigation should be
27 considered. The Department may require additional, targeted monitoring if the data indicate the
28 potential for significant impacts that cannot be addressed by worst-case analysis and appropriate
29 mitigation.

30 The certificate holder shall calculate fatality rates using the statistical methods described
31 in Section (e). On an annual basis, the certificate holder shall report an estimate of fatalities in
32 eight categories: 1) all birds, 2) small birds, 3) large birds, 4) raptors, 5) grassland birds, 6)
33 nocturnal migrants, 7) State Sensitive Species listed under OAR 635-100-0040 and 8) bats.

34 If the sample size is large enough to conduct a comparison study of large and small
35 turbines and the Department approves, the certificate holder shall compare the fatality rates in
36 the "all birds" category for each of the turbine size classes. In proposing a comparison study of
37 large and small turbines, the certificate holder may include available data collected at other wind
38 energy facilities in similar habitat areas, if the data are based on comparable survey protocols and
39 are appropriately adjusted for removal and searcher efficiency bias.

40 The certificate holder shall estimate the number of avian and bat fatalities attributable to
41 operation of the facility based on the number of avian and bat fatalities found at the facility site.
42 All carcasses located within areas surveyed, regardless of species, will be recorded and, if

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 possible, a cause of death determined based on blind necropsy results. If a different cause of
2 death is not apparent, the fatality will be attributed to facility operation. The total number of
3 avian and bat fatalities will be estimated by adjusting for removal and searcher efficiency bias.

4 Personnel trained in proper search techniques (“the searchers”) will conduct the carcass
5 searches by walking parallel transects within the search plots.⁸⁶ Transects will be initially set at 6
6 meters apart in the area to be searched. A searcher will walk at a rate of approximately 45 to 60
7 meters per minute along each transect searching both sides out to three meters for casualties.
8 Search area and speed may be adjusted by habitat type after evaluation of the first searcher
9 efficiency trial. The searchers will record the condition of each carcass found, using the
10 following condition categories:

- 11 ▪ Intact – a carcass that is completely intact, is not badly decomposed and shows no
12 sign of being fed upon by a predator or scavenger
- 13 ▪ Scavenged – an entire carcass that shows signs of being fed upon by a predator or
14 scavenger, or portions of a carcass in one location (e.g., wings, skeletal remains,
15 legs, pieces of skin, etc.)
- 16 ▪ Feather Spot – 10 or more feathers at one location indicating predation or
17 scavenging or 2 or more primary feathers

18 All carcasses (avian and bat) found during the standardized carcass searches will be
19 photographed, recorded and labeled with a unique number. Each carcass will be bagged and
20 frozen for future reference and possible necropsy. A copy of the data sheet for each carcass will
21 be kept with the carcass at all times. For each carcass found, searchers will record species, sex
22 and age when possible, date and time collected, location, condition (e.g., intact, scavenged,
23 feather spot) and any comments that may indicate cause of death. Searchers will photograph each
24 carcass as found and will map the find on a detailed map of the search area showing the location
25 of the wind turbines and associated facilities. The certificate holder shall coordinate collection of
26 state endangered, threatened, sensitive or other state protected species with ODFW. The
27 certificate holder shall coordinate collection of federally-listed endangered or threatened species
28 and Migratory Bird Treaty Act protected avian species with the U.S. Fish and Wildlife Service
29 (USFWS). The certificate holder shall obtain appropriate collection permits from ODFW and
30 USFWS.

31 The searchers might discover carcasses incidental to formal carcass searches (e.g., while
32 driving within the project area). For each incidentally discovered carcass, the searcher shall
33 identify, photograph, record data and collect the carcass as would be done for carcasses within
34 the formal search sample during scheduled searches. If the incidentally discovered carcass is
35 found within a formal search plot, the fatality data will be included in the calculation of fatality
36 rates. If the incidentally discovered carcass is found outside a formal search plot, the data will be
37 reported separately. The certificate holder shall coordinate collection of incidentally discovered
38 state endangered, threatened, sensitive or other state protected species with ODFW. The
39 certificate holder shall coordinate collection of incidentally discovered federally-listed
40 endangered or threatened species and Migratory Bird Treaty Act protected avian species with the
41 USFWS.

⁸⁶ Where search plots are adjacent, the search area may be rectangular.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 The certificate holder shall develop and follow a protocol for handling injured birds. Any
2 injured native birds found on the facility site will be carefully captured by a trained project
3 biologist or technician and transported to a qualified rehabilitation specialist approved by the
4 Department.⁸⁷ The certificate holder shall pay costs, if any, charged for time and expenses
5 related to care and rehabilitation of injured native birds found on the site, unless the cause of
6 injury is clearly demonstrated to be unrelated to the facility operations.

7 • **Statistical Methods for Fatality Estimates**

8 The estimate of the total number of wind facility-related fatalities is based on:

- 9 (1) The observed number of carcasses found during standardized searches during the
10 two monitoring years for which the cause of death is attributed to the facility.⁸⁸
11 (2) Searcher efficiency expressed as the proportion of planted carcasses found by
12 searchers.
13 (3) Removal rates expressed as the estimated average probability a carcass is expected
14 to remain in the study area and be available for detection by the searchers during
15 the entire survey period.

16 **Definition of Variables**

17 The following variables are used in the equations below:

- 18 c_i the number of carcasses detected at plot i for the study period of interest (e.g., one
19 year) for which the cause of death is either unknown or is attributed to the facility
20 n the number of search plots
21 k the number of turbines searched (includes the turbines centered within each
22 search plot and a proportion of the number of turbines adjacent to search plots to
23 account for the effect of adjacent turbines on the search plot buffer area)
24 \bar{c} the average number of carcasses observed per turbine per year
25 s the number of carcasses used in removal trials
26 s_c the number of carcasses in removal trials that remain in the study area after 40
27 days
28 se standard error (square of the sample variance of the mean)
29 t_i the time (days) a carcass remains in the study area before it is removed
30 \bar{t} the average time (days) a carcass remains in the study area before it is removed
31 d the total number of carcasses placed in searcher efficiency trials
32 p the estimated proportion of detectable carcasses found by searchers
33 I the average interval between searches in days

⁸⁷ Approved specialists include Lynn Tompkins (wildlife rehabilitator) of Blue Mountain Wildlife, a wildlife rehabilitation center in Pendleton, and the Audubon Bird Care Center in Portland. The certificate holder must obtain Department approval before using other specialists.

⁸⁸ If a different cause of death is not apparent, the fatality will be attributed to facility operation.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

$$\hat{\pi} = \frac{\bar{t} \cdot p}{I} \cdot \left[\frac{\exp\left(\frac{I}{\bar{t}}\right) - 1}{\exp\left(\frac{I}{\bar{t}}\right) - 1 + p} \right]. \quad (4)$$

The estimated per MW annual fatality rate (m) is calculated by:

$$m = \frac{m_i}{C}. \quad (5)$$

The certificate holder shall calculate fatality estimates for: (1) all birds, (2) small birds, (3) large birds, (4) raptors, (5) grassland birds, (6) nocturnal migrants 7) State Sensitive Species listed under OAR 635-100-0040 and 8) bats. If the sample size is large enough to conduct a comparison study of large and small turbines and the Department approves, the certificate holder shall compare the fatality rates in the “all birds” category for each of the turbine size classes. The final reported estimates of m , associated standard errors and 90% confidence intervals will be calculated using bootstrapping (Manly 1997). Bootstrapping is a computer simulation technique that is useful for calculating point estimates, variances and confidence intervals for complicated test statistics. For each iteration of the bootstrap, the plots will be sampled with replacement, trial carcasses will be sampled with replacement and \bar{c} , \bar{t} , p , $\hat{\pi}$ and m will be calculated. A total of 5,000 bootstrap iterations will be used. The reported estimates will be the means of the 5,000 bootstrap estimates. The standard deviation of the bootstrap estimates is the estimated standard error. The lower 5th and upper 95th percentiles of the 5000 bootstrap estimates are estimates of the lower limit and upper limit of 90% confidence intervals.

Nocturnal Migrant and Bat Fatalities

Differences in observed nocturnal migrant and bat fatality rates for lit turbines, unlit turbines that are adjacent to lit turbines and unlit turbines that are not adjacent to lit turbines will be compared graphically and statistically.

• Mitigation

Mitigation may be appropriate if fatality rates exceed a “threshold of concern.” For the purpose of determining whether a threshold has been exceeded, the certificate holder shall calculate the average annual fatality rates for species groups after two years of monitoring. Based on current knowledge of the species that are likely to use the habitat in the area of the facility, the following thresholds apply to the facility:

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

Species Group	Threshold of Concern (fatalities per MW)
Raptors (All eagles, hawks, falcons and owls, including burrowing owls.)	0.09
Raptor species of special concern (Swainson's hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing owl and any federal threatened or endangered raptor species.)	0.06
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59
State sensitive avian species listed under OAR 635-100-0040 (Excluding raptors listed above.)	0.2
Bat species as a group	2.5

1 If the data show that a threshold of concern for a species group has been exceeded, the
2 certificate holder shall implement additional mitigation if the Department determines that
3 mitigation is appropriate based on analysis of the data, consultation with ODFW and
4 consideration of any other significant information available at the time. In addition, the
5 Department may determine that mitigation is appropriate if fatality rates for individual avian or
6 bat species (especially State Sensitive Species) are higher than expected and at a level of
7 biological concern. If the Department determines that mitigation is appropriate, the certificate
8 holder, in consultation with the Department and ODFW, shall propose mitigation measures
9 designed to benefit the affected species. The certificate holder shall implement mitigation as
10 approved by the Council. The Department may recommend additional, targeted data collection if
11 the need for mitigation is unclear based on the information available at the time. The certificate
12 holder shall implement such data collection as approved by the Council.

13 Mitigation should be designed to benefit the affected species group. Mitigation may
14 include, but is not limited to, protection of nesting habitat for the affected group of native species
15 through a conservation easement or similar agreement. Tracts of land that are intact and
16 functional for wildlife are preferable to degraded habitat areas. Preference should be given to
17 protection of land that would otherwise be subject to development or use that would diminish the
18 wildlife value of the land. In addition, mitigation measures might include: enhancement of the
19 protected tract by weed removal and control; increasing the diversity of native grasses and forbs;
20 planting sagebrush or other shrubs; constructing and maintaining artificial nest structures for
21 raptors; improving wildfire response; and conducting or making a contribution to research that
22 will aid in understanding more about the affected species and its conservation needs in the
23 region.

24 • **Raptor Nest Surveys**

25 The objectives of raptor nest surveys are: (1) to estimate the size of the local breeding
26 populations of raptor species that nest on the ground or aboveground in trees or other
27 aboveground nest locations in the vicinity of the facility; and (2) to determine whether operation
28 of the facility results in a reduction of nesting activity or nesting success in the local populations

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 of the following raptor species: Swainson's hawk, golden eagle, ferruginous hawk and burrowing
2 owl.

3 • Survey Protocol

4 • For Raptor Species that Nest Aboveground

5 The certificate holder shall use aerial and ground surveys to evaluate nest success by
6 gathering data on active nests, on nests with young and on young fledged. The certificate holder
7 will share the data with state and federal biologists. For each phase of the facility, the certificate
8 holder shall conduct the first year of post-construction raptor nest surveys in the first raptor
9 nesting season after construction of that phase is completed. The second year of surveys will be
10 done in the fourth year after construction is completed. Thereafter, the certificate holder shall
11 conduct raptor nest surveys as described in Section 2(d) below.

12 During each survey year, the certificate holder will conduct a minimum of one helicopter
13 survey in late May or early June and additional surveys as described in this section. All nests
14 discovered during pre-construction surveys and any nests discovered during post-construction
15 surveys, whether active or inactive, will be given identification numbers. Nest locations will be
16 recorded on U.S. Geological Survey 7.5-minute quadrangle maps. Global positioning system
17 coordinates will be recorded for each nest. Locations of inactive nests will be recorded because
18 they could become occupied during future years.

19 The certificate holder shall conduct the aerial surveys within the site and a 2-mile buffer
20 around the site to determine nest occupancy. Determining nest *occupancy* will likely require two
21 helicopter visits to each nest. For occupied nests, the certificate holder shall determine nesting
22 *success* by a minimum of one ground visit to determine species, number of young and young
23 fledged. "Nesting success" means that the young have successfully fledged (the young are
24 independent of the core nest site). Nests that cannot be monitored due to the landowner denying
25 access will be checked from a distance where feasible.

26 • For Burrowing Owls

27 If burrowing owl nest sites are discovered, the certificate holder will monitor them
28 according to the following protocol. This species is not easily detected during aerial raptor nest
29 surveys. The certificate holder shall record active burrowing owl nest sites in the vicinity of the
30 facility as they are discovered during other wildlife monitoring tasks. Any nests discovered
31 during post-construction surveys, whether active or showing signs of intermittent use by the
32 species, will be given identification numbers. Nest locations will be recorded on U.S. Geological
33 Survey 7.5-minute quadrangle maps. Global positioning system coordinates will be recorded for
34 each nest site. Coordinates for ancillary burrows used by one nesting pair or a group of nesting
35 pairs will also be recorded. Locations of inactive nests will be recorded because they could
36 become occupied during future years.

37 The certificate holder shall conduct burrowing owl monitoring in the same years as the
38 raptor nest surveys described above. For occupied nests, the certificate holder shall determine
39 nesting *success* by a minimum of one ground visit to determine species, number of young and
40 young fledged. "Nesting success" means that the young have successfully fledged (the young
41 may or may not be independent of the core nest site). Three visits to the nest sites may be
42 necessary to determine outcome. Nests that cannot be monitored due to the landowner denying
43 access will be checked from a distance where feasible.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 If burrowing owl nests are discovered during the first year of post-construction raptor
2 nest surveys (the first raptor nesting season after construction is completed), the certificate holder
3 shall monitor those nest locations during the second year of surveys in the fourth year after
4 construction is completed. Thereafter, the certificate holder shall monitor all known burrowing
5 owl nest locations as a part of the long-term raptor nest monitoring program described in Section
6 2(d) below.

7 • Analysis

8 For each phase of the facility, the certificate holder shall analyze the raptor nesting data
9 collected after two survey years to determine whether a reduction in either nesting success or
10 nest use has occurred in the vicinity of the facility. If the analysis indicates a reduction in nesting
11 success or nest use by Swainson's hawks, golden eagles, ferruginous hawks or burrowing owls
12 within the facility site or within 2 miles of the facility site, then the certificate holder shall
13 propose appropriate mitigation for the affected species as described in Section 2© and shall
14 implement mitigation as approved by the Council. At a minimum, if the analysis shows that any
15 raptors of these species have abandoned a nest territory within the facility site or within ½ mile
16 of the facility site or has not fledged any young over the two survey years within that same area,
17 the certificate holder shall assume the abandonment or unsuccessful fledging is due to operation
18 of the facility unless another cause can be demonstrated convincingly.

19 Any reduction in nesting success or nest use could be due to operation of the facility,
20 operation of another wind facility in the vicinity or some other cause. The certificate holder shall
21 attribute the reduction to operation of the if the wind turbine closest to the affected nest site is an
22 turbine, unless the certificate holder demonstrates, and the Department agrees, that the reduction
23 was due to a different cause.

24 Given the low raptor nesting densities in the area and the presence of other wind energy
25 facilities nearby, statistical power to detect a relationship between distance from a wind turbine
26 and nesting parameters (e.g., number of fledglings per reproductive pair) will be very low.
27 Therefore, impacts may have to be judged based on trends in the data, results from other wind
28 energy facility monitoring studies and literature on what is known regarding the populations in
29 the region.

30 • Mitigation

31 The certificate holder shall propose mitigation for the affected species in consultation
32 with the Department and ODFW and shall implement mitigation as approved by the Council. In
33 proposing appropriate mitigation, the certificate holder shall advise the Department if any other
34 wind project in the area is obligated to provide mitigation for a reduction in raptor nesting
35 success at the same nest site. Mitigation should be designed to benefit the affected species or
36 contribute to overall scientific knowledge and understanding of what causes nest abandonment or
37 nest failure. Mitigation may be designed to proceed in phases over several years. It may include,
38 but is not limited to, additional raptor nest monitoring, protection of natural nest sites from
39 human disturbance or cattle activity (preferably within the general area of the facility) or
40 participation in research projects designed to improve scientific understanding of the needs of the
41 affected species.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 • Long-term Raptor Nest Monitoring and Mitigation Plan

2 In addition to the two years of post-construction raptor nest surveys described in Section
3 2(a), the certificate holder shall conduct long-term raptor nest surveys at five-year intervals for
4 the life of the facility.⁸⁹ The certificate holder shall conduct the first long-term raptor nest survey
5 in the ninth year after construction is completed. In conducting long-term surveys, the certificate
6 holder shall follow the same survey protocols as described above in Section 2(a) unless the
7 certificate holder proposes an alternative protocol that is approved by the Department. In
8 developing an alternative protocol, the certificate holder shall consult with ODFW.

9 The certificate holder shall analyze the raptor nesting data collected after each year of
10 long-term raptor nest surveys to determine whether a reduction in either nesting success or nest
11 use has occurred in the vicinity of the facility. If the analysis indicates a reduction in nesting
12 success or nest use by Swainson's hawks, golden eagles, ferruginous hawks or burrowing owls
13 within the facility site or within 2 miles of the facility site, then the certificate holder shall
14 propose appropriate mitigation for the affected species as described in Section 2© and shall
15 implement mitigation as approved by the Council. At a minimum, if the analysis shows that any
16 raptors of these species have abandoned a nest territory within the facility site or within ½ mile
17 of the facility site or has not fledged any young over the two survey years within that same area,
18 the certificate holder shall assume the abandonment or unsuccessful fledging is due to operation
19 of the facility unless another cause can be demonstrated convincingly.

20 Any reduction in nesting success or nest use could be due to operation of the facility,
21 operation of another wind facility in the vicinity or some other cause, including changes in land
22 use patterns after construction of the facility. The certificate holder shall attribute the reduction
23 to operation of LJV if the wind turbine closest to the affected nest site is an LJV turbine unless
24 the certificate holder demonstrates, and the Department agrees, that the reduction was due to a
25 different cause.

26 Given the low raptor nesting densities in the area and the presence of other wind energy
27 facilities nearby, statistical power to detect a relationship between distance from a wind turbine
28 and nesting parameters (e.g., number of fledglings per reproductive pair) will be very low.
29 Therefore, impacts may have to be judged based on trends in the data, results from other wind
30 energy facility monitoring studies and literature on what is known regarding the populations in
31 the region.

32 • Washington ground squirrel surveys

33 For the LJIIA area, the certificate holder shall conduct long-term post-construction
34 surveys to collect data on Washington ground squirrel (WGS) activity within the lease boundary.
35 A qualified professional biologist will monitor the WGS sites in the LJIIA area identified during
36 the pre-construction surveys (2005 through 2007) and the buffer area within 500 feet in all
37 directions from the identified WGS sites in suitable habitat. The certificate holder shall conduct
38 surveys during the year following construction and every three years thereafter for the life of the
39 facility. Surveyors will walk standard protocol-level transects twice between late March and late
40 May and record level of use, notes on natal sites and physical extent of the sites. Details of the

⁸⁹ As used in this plan, "life of the facility" means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 post-construction WGS monitoring for the LJIA area are set forth in the Incidental Take Permit
2 application as set forth in Attachment E of the Final Order on the Application.

3 An Incidental Take Permit is not required for the LJIB area. Biologists conducting other
4 monitoring of the LJIB area (including the fatality monitoring and raptor nest surveys described
5 above) will make note of any WGS activity they observe and will report the incidental
6 observations, including mapping and dates of the observations. In conjunction with the raptor
7 nest surveys for LJIB described above, a qualified professional biologist (investigator) will
8 assess the status of colonies 13, 14, 15a, 15b, 16, 17, 22a, 22b, 23, and 24 (identified in the
9 Request for Amendment #1, Attachment 7, Figure 6b-3). The WGS assessments will occur
10 during the active WGS periods in the first and fourth years of operation and every five years
11 thereafter for the life of the project. The investigator shall record evidence of WGS
12 activity, current land use and evidence of project-caused conditions that might increase erosion
13 or result in a decline in vegetation quality and adversely affect a WGS colony.

14 • **Grassland Bird Study**

15 The grassland bird study is a 2-year, post-construction evaluation of grassland bird use in
16 the LJF area. Parts of the facility occupy native habitat suitable for various ground-nesting bird
17 species that nest in grassland or open low shrub habitat. Grassland birds that were documented
18 on-site during baseline surveys conducted in 2006 included long-billed curlew, grasshopper
19 sparrow, savannah sparrow, Western meadowlark and horned lark. These species are likely to
20 nest on-site. Loggerhead shrikes may be present in the area but were not observed.

21 During the 2006 pre-construction surveys of the northern area of the, the applicant
22 surveyed 57 transects. The transects were approximately 60-meters wide. They were searched
23 twice during the peak period of activity for the target species (March through May). Locations of
24 territorial male grasshopper sparrows were recorded with a GPS unit. GPS locations of
25 (assumed) paired long-billed curlews or approximate location of the pair's primary activity area
26 and locations of curlew nests were also recorded. Surveyors made notes on the general location
27 of special status grassland bird species observed in the area and on any observed behavior (for
28 example, nesting, staging, courtship, non-breeders foraging in loose groups).⁹⁰ The surveyors
29 noted detections of common species in blocks of areas surveyed (several transects combined) but
30 did not record GPS locations or count the number of individuals present.

31 The objective of the post-construction grassland bird study is to determine if there are
32 noticeable changes in the presence and overall use by special status grassland bird species
33 compared to pre-construction data collected in 2006. By surveying a large area that includes the
34 undisturbed area between turbine strings, the study could provide information on whether
35 operation of the facility discourages use of the area by two indicator species: grasshopper
36 sparrows and long-billed curlews. In addition to focusing on the two indicator species, the post-
37 construction surveys will include observations of common species such as western meadowlark,
38 savannah sparrow and horned lark to provide information on the presence and distribution of
39 these species within the study area and their behavior relative to turbine locations. The phrase
40 "behavior relative to turbine locations" is intended to address observations of behavior that is
41 different near turbines compared behavior away from turbines.

⁹⁰ As used in this section, "special status grassland bird species" means grasshopper sparrows, long-billed curlews, loggerhead shrikes and burrowing owls.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 • Study Area

2 The study area is located within the LJIIA area and covers approximately 1,362 acres.⁹¹
3 For purposes of this discussion, the area north of Rattlesnake Road is referred to as the “north
4 study area,” and the area south of the road is referred to as the “south study area.”

5 The north study area is bounded by the lease boundary on the northeast and west sides
6 and by Rattlesnake Road on the southeast side. The south study area is bounded by an existing
7 power line on the west and natural topography on the other sides. The north study area contains
8 two proposed turbine strings of up to eight turbines and associated access roads and transmission
9 components. The south study area contains proposed access roads and five turbines. The south
10 study area might include burrowing owl dens, but no confirmed nests were discovered in the
11 baseline surveys. The habitat in the north study area is primarily shrub-steppe with grassland-like
12 vegetation in a recovery stage (it is assumed that fire disturbance has removed areas of mature
13 shrubs). The south study area includes relatively flat ground with some gentle slopes and a dry
14 drainage. The habitat in the south study area is similar to the habitat in the north study area and is
15 relatively open grassland with some shrubs. Habitat for both the north and south study areas is
16 not highly variable and is representative of a large portion of the remainder of the North lease
17 area. Areas containing laydown areas and unsuitable habitat will not be studied.

18 The study areas were selected because they are somewhat removed from human activity
19 (except low traffic use on facility access roads and one county road) and contain a large area of
20 grassland/shrub-steppe habitat (mapped as habitat sub-type “SSB”) that is not proposed to be
21 altered during project construction or operations.

22 • Survey Protocol

23 After completion of construction of the facility, the certificate holder shall survey the 57
24 transects that were searched before construction in 2006. Surveyors will collect data on the
25 indicator species (grasshopper sparrows and long-billed curlews) and other special status
26 grassland bird species. For all special status grassland bird species observed, the surveyors will
27 record the number of observations of these species and their GPS locations, using the same
28 methodology used in 2006. Special status grassland bird species that fly readily in the surveyor’s
29 presence will be tracked visually to attempt to determine defended territories and to limit
30 potential double-counting of individuals. Surveyors will record notes on the general location and
31 behavior of special status grassland bird species (for example, defensive responses, nesting,
32 staging, courtship, non-breeders foraging in loose groups). This plotted data will provide
33 information on the location of special status grassland bird species at distances near and far from
34 turbines and other facilities.

35 Surveyors will record notes on the location and abundance of common species. Abundant
36 common species that fly readily in the surveyor’s presence will be tracked visually to avoid
37 double counting. Horned lark observations will be totaled for each survey area completed in one
38 survey day. The data on the relative abundance and distribution of common species will provide
39 information on the location of common species at distances near and far from turbines and other
40 facilities.

⁹¹ The study area and its underlying habitat types are shown on “Figure 1: Areas to be studied for Grassland Birds during Operations Phase” (Response to Additional RAI, Attachment 2, October 2, 2009).

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 The certificate holder shall conduct the first year of post-construction grassland surveys
2 in the first spring following the beginning of commercial operation of the facility. The certificate
3 holder shall conduct a second year of grassland surveys two to five years after the first survey.
4 The certificate holder will determine when the second survey will be done, in consultation with
5 ODFW and subject to approval by the Department, based on the restoration of grassland cover in
6 areas disturbed during facility construction.

7 In each survey year, surveyors will complete two walking transect surveys of the north
8 and south study areas (one in April and one in May). A third visit to specific potential burrowing
9 owl dens (based on 2006 data and any newly discovered sites) will be conducted during the
10 period from late May to early July, if the surveyor determines a third visit is needed to confirm
11 use by burrowing owls. The April and May time period includes the seasonal period of staging
12 (pre-nesting) of long-billed curlews (April), the major period of territorial calling of grasshopper
13 sparrows (May) and the nesting period for long-billed curlews and other species (May).

14 • Data Analysis and Reporting

15 After the first survey year, the certificate holder shall submit a preliminary summary
16 report to the Department. After the second survey year, the certificate holder shall submit a more
17 comprehensive final report. The certificate holder shall submit maps for each survey year,
18 showing transects walked and specific areas of use by the indicator species, other special status
19 grassland bird species and common species (except horned larks). The certificate holder shall
20 overlay a grid system on the mapped “as-built” locations of facility components within the study
21 areas. Using the grid system, the certificate holder shall describe the survey results by area and
22 distance from turbines.

23 The reports will include a description of vegetation compared to pre-construction
24 conditions as recorded in 2006, including notes on any changes in land use by the landowner,
25 wildfire influences and grazing and noting any areas of intense vegetation impact. Vegetation
26 communities will be sampled by the transect method and a description of plant communities will
27 be provided for each survey year.

28 The certificate holder shall report on observed changes in use by the indicator species.
29 For example, the report will compare the locations and numbers of grasshopper sparrows plotted
30 during the pre-construction surveys in the north study area to the locations and numbers of this
31 species plotted during the post-construction survey years. The certificate holder shall report on
32 the location of any burrowing owls observed during the transect searches or subsequent visits
33 made to confirm use. The certificate holder shall analyze the locations for all special status
34 grassland bird species (using GPS data) and common species (except horned larks) to calculate
35 distance from turbines or other facilities.⁹²

36 The certificate holder shall evaluate the data to determine if there are changes in the use
37 of the study areas by the two indicator species before and after construction. In addition, the
38 certificate holder shall evaluate the data to determine if there is noticeable difference in the
39 distribution, abundance or behavior of special status grassland bird species or common species
40 relative to turbine locations.

⁹² Data on common species cannot be compared to preconstruction data because the 2006 surveys did not record the location or abundance of these species by transect line. GPS data will not be collected for common species.

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 • **Wildlife Reporting and Handling System**

2 The Wildlife Reporting and Handling System (WRHS) is a monitoring program to search
3 for and handle avian and bat casualties found by maintenance personnel during operation of the
4 facility. Maintenance personnel will be trained in the methods needed to carry out this program.
5 This monitoring program includes the initial response, the handling and the reporting of bird and
6 bat carcasses discovered incidental to maintenance operations (“incidental finds”).

7 All avian and bat carcasses discovered by maintenance personnel will be photographed
8 and the data recorded as would be done for carcasses within the formal search sample during
9 scheduled searches. If maintenance personnel discover incidental finds, the maintenance
10 personnel will notify a project biologist. The project biologist must be a qualified independent
11 professional biologist who is not an employee of the certificate holder. The project biologist (or
12 the project biologist’s experienced wildlife technician) will collect the carcass or will instruct
13 maintenance personnel to have an on-site carcass handling permittee collect the carcass. The
14 certificate holder’s on-site carcass handling permittee must be a person who is listed on state and
15 federal scientific or salvage collection permits and who is available to process (collect) the find
16 on the day it is discovered. The find must be processed on the same day as it is discovered.

17 During the years in which fatality monitoring occurs, if maintenance personnel discover
18 incidental finds outside the search plots for the fatality monitoring searches, the data will be
19 reported separately from fatality monitoring data. If maintenance personnel discover carcasses
20 within search plots, the data will be included in the calculation of fatality rates. The maintenance
21 personnel will notify a project biologist. The project biologist will collect the carcass or will
22 instruct maintenance personnel to have an on-site carcass handling permittee collect the carcass.
23 As stated above, the on-site permittee must be available to process the find on the day it is
24 discovered. The certificate holder shall coordinate collection of state endangered, threatened,
25 sensitive or other state protected species with ODFW. The certificate holder shall coordinate
26 collection of federally-listed endangered or threatened species and Migratory Bird Treaty Act
27 protected avian species with the USFWS.

28 • **Data Reporting**

29 The certificate holder will report wildlife monitoring data and analysis to the Department.
30 Monitoring data include fatality monitoring program data, raptor nest survey data, WGS survey
31 data for the LJIIA area, WGS incidental observation and assessment reports for the LJIIB area,
32 grassland bird study data and WRHS data. The certificate holder may include the reporting of
33 wildlife monitoring data and analysis in the annual report required under OAR 345-026-0080 or
34 submit this information as a separate document at the same time the annual report is submitted.
35 In addition, the certificate holder shall provide to the Department any data or record generated in
36 carrying out this monitoring plan upon request by the Department.

37 The certificate holder shall notify USFWS and ODFW immediately if any federal or state
38 endangered or threatened species are killed or injured on the facility site.

39 The public will have an opportunity to receive information about monitoring results and
40 to offer comment. Within 30 days after receiving the final versions of reports that are required

Leaning Juniper IIA Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 under this plan, the Department will make the reports available to the public on its website and
2 will specify a time in which the public may submit comments to the Department.⁹³

3 • **Amendment of the Plan**

4 This Wildlife Monitoring and Mitigation Plan may be amended from time to time by
5 agreement of the certificate holder and the Council. Such amendments may be made without
6 amendment of the site certificate. The Council authorizes the Department to agree to
7 amendments to this plan and to mitigation actions that may be required under this plan. The
8 Department shall notify the Council of all amendments and mitigation actions, and the Council
9 retains the authority to approve, reject or modify any amendment of this plan or mitigation action
10 agreed to by the Department.

11

⁹³ The certificate holder may establish a Technical Advisor Committee (TAC) but is not required to do so. If the certificate holder establishes a TAC, the TAC may offer comments to the Council about the results of the monitoring required under this plan.

Leaning Juniper IIB Wind Project: Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 This plan describes wildlife monitoring that the certificate holder shall conduct during
2 operation of the Leaning Juniper IIB Wind Power Facility .⁹⁴ The monitoring objectives are to
3 determine whether the facility causes significant fatalities of birds and bats and to determine
4 whether the facility results in a loss of habitat quality.

5 Per Amendment 2 to Leaning Juniper II Wind Power Facility, the facility was divided
6 into two separate facilities with LJIIA and LJIIB each receiving its own site certificates.
7 However, the site certificate holders agreed to share mitigation and environmental
8 responsibilities. Therefore, the requirements for the facility as a whole, including both LJIIA and
9 LJIIB, remain in this Wildlife Monitoring and Mitigation Plan and each individual site certificate
10 holder remains bound by its terms.

11 The facility consists of up to 127 wind turbines, four non-guyed meteorological (met)
12 towers and other related or supporting facilities as described in the site certificate. The
13 permanent facility components occupy approximately 111 acres, of which up to 52 acres is
14 Category 5 wildlife habitat or better, based on the Oregon Department of Fish and Wildlife
15 (ODFW) standards (OAR 635-415-0025).⁹⁵ The certificate holder shall use experienced
16 personnel to implement the monitoring required under this plan and properly trained personnel to
17 conduct the monitoring, subject to approval by the Oregon Department of Energy (Department)
18 as to professional qualifications. For all components of this plan except the Wildlife Reporting
19 and Handling System, the certificate holder shall hire an independent third party (not employees
20 of the certificate holder) to perform monitoring tasks.

21 The Wildlife Monitoring and Mitigation Plan for the has the following components:

22 7) Fatality monitoring program including:

- 23 a) Removal trials
- 24 b) Searcher efficiency trials
- 25 c) Fatality search protocol
- 26 d) Statistical analysis

27 8) Raptor nesting surveys

28 9) Washington ground squirrel surveys

29 10) Grassland bird study

30 11) Wildlife Reporting and Handling System

31 Based on the results of the monitoring programs, mitigation of significant impacts may be
32 required. The selection of the mitigation actions should allow for flexibility in creating
33 appropriate responses to monitoring results that cannot be known in advance. If the Department
34 determines that mitigation is needed, the certificate holder shall propose appropriate mitigation

⁹⁴ This plan is incorporated by reference in the site certificate for the LJP and must be understood in that context. It is not a "stand-alone" document. This plan does not contain all mitigation required of the certificate holder.

⁹⁵ A more complete description of the habitat areas affected by each facility, LJIIA and LJIB, is provided in the Final Order on Amendment #1, Section IV.4(b), which expanded the site boundary to include LJIB

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 actions to the Department and shall carry out mitigation actions approved by the Department,
2 subject to review by the Oregon Energy Facility Council (Council).

3 **Fatality Monitoring**

4 **Definitions and Methods**

5 • Seasons

6 This plan uses the following dates for defining seasons:

Season	Dates
Spring Migration	March 16 to May 15
Summer/Breeding	May 16 to August 15
Fall Migration	August 16 to October 31
Winter	November 1 to March 15

7 • Search Plots

8 The certificate holder shall conduct fatality monitoring within search plots. The
9 certificate holder, in consultation with the Oregon Department of Fish and Wildlife (ODFW),
10 shall select search plots based on a systematic sampling design that ensures that the selected
11 search plots are representative of the habitat conditions in different parts of the site. Each search
12 plot will contain one turbine. Search plots will be square or circular. Circular search plots will be
13 centered on the turbine location and will have a radius equal to the maximum blade tip height of
14 the turbine contained within the plot. "Maximum blade tip height" is the turbine hub-height plus
15 one-half the rotor diameter. Square search plots will be of sufficient size to contain a circular
16 search plot as described above. The certificate holder shall provide maps of the search plots to
17 the Department before beginning fatality monitoring at the facility. The certificate holder shall
18 use the same search plots for each search conducted during a monitoring year.

19 • Scheduling

20 In each monitoring year, the certificate holder shall conduct fatality monitoring searches
21 at the rates of frequency shown below. Over the course of one monitoring year, the certificate
22 holder would conduct 16 searches, as follows:

Season	Frequency
Spring Migration	2 searches per month (4 searches)
Summer/Breeding	1 search per month (3 searches)
Fall Migration	2 searches per month (5 searches)
Winter	1 search per month (4 searches)

23 • Sample Size

24 The sample size for fatality monitoring is the number of turbines searched per monitoring
25 year. During each monitoring year, the certificate holder shall search a minimum of 50 turbines.
26 If fewer than 50 turbines are built, the certificate holder shall search all turbines.

27 As described in the site certificate, the certificate holder may choose to build the using
28 turbine types in two size classes:

- 29 • Small: turbines having a rotor diameter of 82 meters or less

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

- 1 • Large: turbines having a rotor diameter greater than 82 meters

2 If the final design of the LJF facility includes both small and large turbines, the
3 certificate holder shall consult with an independent expert with experience in statistical analysis
4 of avian fatality data to determine whether it would be possible to design a 50-turbine sample
5 with a sufficient number of turbines in each size class to allow a statistical comparison of fatality
6 rates for all birds as a group. The certificate holder shall submit the expert's written analysis to
7 the Department. If the expert's analysis shows that a comparison study is possible and if the
8 Department approves, the certificate holder shall sample the appropriate number of turbines in
9 each class and conduct the comparison study. The certificate holder may choose to sample more
10 than 50 turbines in each monitoring year, if a larger sample size would allow the comparison
11 study to be done.

12 Removal Trials

13 The objective of the removal trials is to estimate the length of time avian and bat
14 carcasses remain in the search area. Carcass removal studies will be conducted during each
15 season in the vicinity of the search plots. Estimates of carcass removal rates will be used to
16 adjust carcass counts for removal bias. "Carcass removal" is the disappearance of a carcass from
17 the search area due to predation, scavenging or other means such as farming activity. Removal
18 rates will be estimated by size class, habitat type and season.

19 The certificate holder shall conduct carcass removal trials within each of the seasons
20 defined above during the years in which fatality monitoring occurs. During the first year in
21 which fatality monitoring occurs, the certificate holder shall conduct one removal trial per season
22 (four removal trials per year). For each trial, at least 10 small bird carcasses and at least 10 large
23 bird carcasses will be distributed throughout the project area (approximately 80 trial carcasses
24 per year).

25 Before beginning removal trials for the second year of fatality monitoring, the certificate
26 holder shall report the results of the first year removal trials to the Department and ODFW. In the
27 report, the certificate holder shall analyze whether four removal trials per year, as described
28 above, provides sufficient data to accurately estimate adjustment factors for carcass removal. The
29 number of removal trials for the second year of fatality monitoring may be adjusted up or down,
30 subject to the approval of the Department.

31 The "small bird" size class will use carcasses of house sparrows, starlings, commercially
32 available game bird chicks or legally obtained native birds to simulate passerines. The "large
33 bird" size class will use carcasses of raptors provided by agencies, commercially available adult
34 game birds or cryptically colored chickens to simulate raptors, game birds and waterfowl. If
35 fresh bat carcasses are available, they may also be used.

36 To avoid confusion with turbine-related fatalities, planted carcasses will not be placed in
37 fatality monitoring search plots. Planted carcasses will be placed in the vicinity of search plots
38 but not so near as to attract scavengers to the search plots. The planted carcasses will be located
39 randomly within the carcass removal trial plots.

40 Carcasses will be placed in a variety of postures to simulate a range of conditions. For
41 example, birds will be: 1) placed in an exposed posture (e.g., thrown over the shoulder), 2)
42 hidden to simulate a crippled bird (e.g., placed beneath a shrub or tuft of grass) or 3) partially

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 hidden. Trial carcasses will be marked discreetly for recognition by searchers and other
2 personnel. Trial carcasses will be left at the location until the end of the carcass removal trial.

3 It is expected that carcasses will be checked as follows, although actual intervals may
4 vary. Carcasses will be checked for a period of 40 days to determine removal rates. They will be
5 checked approximately every day for the first 4 days, and then on day 7, day 10, day 14, day 20,
6 day 30 and day 40. This schedule may vary depending on weather and coordination with the
7 other survey work. At the end of the 40-day period, the trial carcasses and scattered feathers will
8 be removed.

9 **Searcher Efficiency Trials**

10 The objective of searcher efficiency trials is to estimate the percentage of bird and bat
11 fatalities that searchers are able to find. The certificate holder shall conduct searcher efficiency
12 trials on the fatality monitoring search plots in both grassland/shrub-steppe and cultivated
13 agriculture habitat types. Searcher efficiency will be estimated by size class, habitat type and
14 season. A pooled estimate of searcher efficiency will be used to adjust carcass counts for
15 detection bias.

16 The certificate holder shall conduct searcher efficiency trials within each of the seasons
17 defined above during the years in which the fatality monitoring occurs. During each season of
18 the years in which fatality monitoring occurs, the certificate holder shall use approximately 25
19 carcasses for searcher efficiency trials (approximately 100 carcasses per year). The certificate
20 holder shall vary the number of trials per season and the number of carcasses per trial so that the
21 searchers will not know the total number of trial carcasses being used in any trial. The certificate
22 holder shall distribute trial carcasses in varied habitat in rough proportion to the habitat types
23 within the facility site. During each season, both small bird and large bird carcasses will be used
24 in approximately equal numbers. "Small bird" and "large bird" size classes and carcass selection
25 are as described above for the removal trials.

26 Before beginning searcher efficiency trials for the second year of fatality monitoring, the
27 certificate holder shall report the results of the first year efficiency trials to the Department and
28 ODFW. In the report, the certificate holder shall analyze whether the efficiency trials as
29 described above (using approximately 100 carcasses per year) provides sufficient data to
30 accurately estimate adjustment factors for carcass removal. The number of removal trials for the
31 second year of fatality monitoring may be adjusted up or down, subject to the approval of the
32 Department.

33 Personnel conducting searches will not know in advance when trials are conducted; nor
34 will they know the location of the trial carcasses. If suitable trial carcasses are available, trials
35 during the fall season will include several small brown birds to simulate bat carcasses. Legally
36 obtained bat carcasses will be used if available.

37 On the day of a standardized fatality monitoring search (described below) but before the
38 beginning of the search, efficiency trial carcasses will be placed at random locations within areas
39 to be searched. If scavengers appear attracted by placement of carcasses, the carcasses will be
40 distributed before dawn.

41 Efficiency trials will be spread over the entire season to incorporate effects of varying
42 weather and vegetation growth. Carcasses will be placed in a variety of postures to simulate a

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 range of conditions. For example, birds will be: 1) placed in an exposed posture (thrown over the
2 shoulder), 2) hidden to simulate a crippled bird or 3) partially hidden.

3 Each non-domestic carcass will be discreetly marked so that it can be identified as an
4 efficiency trial carcass after it is found. The number and location of the efficiency trial carcasses
5 found during the carcass search will be recorded. The number of efficiency trial carcasses
6 available for detection during each trial will be determined immediately after the trial by the
7 person responsible for distributing the carcasses.

8 If new searchers are brought into the search team, additional searcher efficiency trials
9 will be conducted to ensure that detection rates incorporate searcher differences. The certificate
10 holder shall include a discussion of any changes in search personnel and any additional detection
11 trials in the reporting required under Section □ of this plan.

12 **Fatality Monitoring Search Protocol**

13 The objective fatality monitoring is to estimate the number of bird and bat fatalities that
14 are attributable to facility operation as an indicator of the impact of the facility on habitat quality.
15 The goal of bird and bat fatality monitoring is to estimate fatality rates and associated variances.
16 The certificate holder shall conduct fatality monitoring using standardized carcass searches. For
17 each phase of the facility, the certificate holder shall conduct fatality monitoring for two years
18 (32 searches), beginning one month after the start of commercial operation of that phase.

19 The certificate holder shall use a worst-case analysis to resolve any uncertainty in the
20 results and to determine whether the data indicate that additional mitigation should be
21 considered. The Department may require additional, targeted monitoring if the data indicate the
22 potential for significant impacts that cannot be addressed by worst-case analysis and appropriate
23 mitigation.

24 The certificate holder shall calculate fatality rates using the statistical methods described
25 in Section (e). On an annual basis, the certificate holder shall report an estimate of fatalities in
26 eight categories: 1) all birds, 2) small birds, 3) large birds, 4) raptors, 5) grassland birds, 6)
27 nocturnal migrants, 7) State Sensitive Species listed under OAR 635-100-0040 and 8) bats.

28 If the sample size is large enough to conduct a comparison study of large and small
29 turbines and the Department approves, the certificate holder shall compare the fatality rates in
30 the “all birds” category for each of the turbine size classes. In proposing a comparison study of
31 large and small turbines, the certificate holder may include available data collected at other wind
32 energy facilities in similar habitat areas, if the data are based on comparable survey protocols and
33 are appropriately adjusted for removal and searcher efficiency bias.

34 The certificate holder shall estimate the number of avian and bat fatalities attributable to
35 operation of the facility based on the number of avian and bat fatalities found at the facility site.
36 All carcasses located within areas surveyed, regardless of species, will be recorded and, if
37 possible, a cause of death determined based on blind necropsy results. If a different cause of
38 death is not apparent, the fatality will be attributed to facility operation. The total number of
39 avian and bat fatalities will be estimated by adjusting for removal and searcher efficiency bias.

40 Personnel trained in proper search techniques (“the searchers”) will conduct the carcass
41 searches by walking parallel transects within the search plots.⁹⁶ Transects will be initially set at 6

⁹⁶ Where search plots are adjacent, the search area may be rectangular.

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 meters apart in the area to be searched. A searcher will walk at a rate of approximately 45 to 60
2 meters per minute along each transect searching both sides out to three meters for casualties.
3 Search area and speed may be adjusted by habitat type after evaluation of the first searcher
4 efficiency trial. The searchers will record the condition of each carcass found, using the
5 following condition categories:

- 6 ▪ Intact – a carcass that is completely intact, is not badly decomposed and shows no
7 sign of being fed upon by a predator or scavenger
- 8 ▪ Scavenged – an entire carcass that shows signs of being fed upon by a predator or
9 scavenger, or portions of a carcass in one location (e.g., wings, skeletal remains,
10 legs, pieces of skin, etc.)
- 11 ▪ Feather Spot – 10 or more feathers at one location indicating predation or
12 scavenging or 2 or more primary feathers

13 All carcasses (avian and bat) found during the standardized carcass searches will be
14 photographed, recorded and labeled with a unique number. Each carcass will be bagged and
15 frozen for future reference and possible necropsy. A copy of the data sheet for each carcass will
16 be kept with the carcass at all times. For each carcass found, searchers will record species, sex
17 and age when possible, date and time collected, location, condition (e.g., intact, scavenged,
18 feather spot) and any comments that may indicate cause of death. Searchers will photograph each
19 carcass as found and will map the find on a detailed map of the search area showing the location
20 of the wind turbines and associated facilities. The certificate holder shall coordinate collection of
21 state endangered, threatened, sensitive or other state protected species with ODFW. The
22 certificate holder shall coordinate collection of federally-listed endangered or threatened species
23 and Migratory Bird Treaty Act protected avian species with the U.S. Fish and Wildlife Service
24 (USFWS). The certificate holder shall obtain appropriate collection permits from ODFW and
25 USFWS.

26 The searchers might discover carcasses incidental to formal carcass searches (e.g., while
27 driving within the project area). For each incidentally discovered carcass, the searcher shall
28 identify, photograph, record data and collect the carcass as would be done for carcasses within
29 the formal search sample during scheduled searches. If the incidentally discovered carcass is
30 found within a formal search plot, the fatality data will be included in the calculation of fatality
31 rates. If the incidentally discovered carcass is found outside a formal search plot, the data will be
32 reported separately. The certificate holder shall coordinate collection of incidentally discovered
33 state endangered, threatened, sensitive or other state protected species with ODFW. The
34 certificate holder shall coordinate collection of incidentally discovered federally-listed
35 endangered or threatened species and Migratory Bird Treaty Act protected avian species with the
36 USFWS.

37 The certificate holder shall develop and follow a protocol for handling injured birds. Any
38 injured native birds found on the facility site will be carefully captured by a trained project
39 biologist or technician and transported to a qualified rehabilitation specialist approved by the
40 Department.⁹⁷ The certificate holder shall pay costs, if any, charged for time and expenses

⁹⁷ Approved specialists include Lynn Tompkins (wildlife rehabilitator) of Blue Mountain Wildlife, a wildlife rehabilitation center in Pendleton, and the Audubon Bird Care Center in Portland. The certificate holder must obtain Department approval before using other specialists.

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 related to care and rehabilitation of injured native birds found on the site, unless the cause of
2 injury is clearly demonstrated to be unrelated to the facility operations.

3 **Statistical Methods for Fatality Estimates**

4 The estimate of the total number of wind facility-related fatalities is based on:

5 (4) The observed number of carcasses found during standardized searches during the
6 two monitoring years for which the cause of death is attributed to the facility.⁹⁸

7 (5) Searcher efficiency expressed as the proportion of planted carcasses found by
8 searchers.

9 (6) Removal rates expressed as the estimated average probability a carcass is expected
10 to remain in the study area and be available for detection by the searchers during
11 the entire survey period.

12 **Definition of Variables**

13 The following variables are used in the equations below:

14 c_i the number of carcasses detected at plot i for the study period of interest (e.g., one
15 year) for which the cause of death is either unknown or is attributed to the facility

16 n the number of search plots

17 k the number of turbines searched (includes the turbines centered within each
18 search plot and a proportion of the number of turbines adjacent to search plots to
19 account for the effect of adjacent turbines on the search plot buffer area)

20 \bar{c} the average number of carcasses observed per turbine per year

21 s the number of carcasses used in removal trials

22 s_c the number of carcasses in removal trials that remain in the study area after 40
23 days

24 se standard error (square of the sample variance of the mean)

25 t_i the time (days) a carcass remains in the study area before it is removed

26 \bar{t} the average time (days) a carcass remains in the study area before it is removed

27 d the total number of carcasses placed in searcher efficiency trials

28 p the estimated proportion of detectable carcasses found by searchers

29 I the average interval between searches in days

30 $\hat{\pi}$ the estimated probability that a carcass is both available to be found during a
31 search and is found

32 m_i the estimated annual average number of fatalities per turbine per year, adjusted
33 for removal and observer detection bias

34 C nameplate energy output of turbine in megawatts (MW)

⁹⁸ If a different cause of death is not apparent, the fatality will be attributed to facility operation.

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 Observed Number of Carcasses

2 The estimated average number of carcasses (\bar{c}) observed per turbine per year is:

3
$$\bar{c} = \frac{\sum_{i=1}^n c_i}{k} . \tag{1}$$

4 Estimation of Carcass Removal

5 Estimates of carcass removal are used to adjust carcass counts for removal bias. Mean carcass
6 removal time (\bar{t}) is the average length of time a carcass remains at the site before it is removed:

7
$$\bar{t} = \frac{\sum_{i=1}^s t_i}{s - s_c} . \tag{2}$$

8 This estimator is the maximum likelihood estimator assuming the removal times follow an
9 exponential distribution and there is right-censoring of data. Any trial carcasses still remaining at
10 40 days are collected, yielding censored observations at 40 days. If all trial carcasses are
11 removed before the end of the trial, then s_c is 0, and \bar{t} is just the arithmetic average of the
12 removal times. Removal rates will be estimated by carcass size (small and large), habitat type
13 and season.

14 Estimation of Observer Detection Rates

15 Observer detection rates (i.e., searcher efficiency rates) are expressed as p , the proportion
16 of trial carcasses that are detected by searchers. Observer detection rates will be estimated by
17 carcass size, habitat type and season.

18 Estimation of Facility-Related Fatality Rates

19 The estimated per turbine annual fatality rate (m_t) is calculated by:

20
$$m_t = \frac{\bar{c}}{\hat{\pi}} , \tag{3}$$

21 where $\hat{\pi}$ includes adjustments for both carcass removal (from scavenging and other means) and
22 observer detection bias assuming that the carcass removal times t_i follow an exponential
23 distribution. Under these assumptions, this detection probability is estimated by:

24
$$\hat{\pi} = \frac{\bar{t} \cdot p}{I} \cdot \left[\frac{\exp\left(\frac{I}{\bar{t}}\right) - 1}{\exp\left(\frac{I}{\bar{t}}\right) - 1 + p} \right] . \tag{4}$$

25 The estimated per MW annual fatality rate (m) is calculated by:

26
$$m = \frac{m_t}{C} . \tag{5}$$

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 The certificate holder shall calculate fatality estimates for: (1) all birds, (2) small birds,
2 (3) large birds, (4) raptors, (5) grassland birds, (6) nocturnal migrants 7) State Sensitive Species
3 listed under OAR 635-100-0040 and 8) bats. If the sample size is large enough to conduct a
4 comparison study of large and small turbines and the Department approves, the certificate holder
5 shall compare the fatality rates in the “all birds” category for each of the turbine size classes. The
6 final reported estimates of m , associated standard errors and 90% confidence intervals will be
7 calculated using bootstrapping (Manly 1997). Bootstrapping is a computer simulation technique
8 that is useful for calculating point estimates, variances and confidence intervals for complicated
9 test statistics. For each iteration of the bootstrap, the plots will be sampled with replacement, trial
10 carcasses will be sampled with replacement and \bar{c} , \bar{l} , p , $\hat{\pi}$ and m will be calculated. A total of
11 5,000 bootstrap iterations will be used. The reported estimates will be the means of the 5,000
12 bootstrap estimates. The standard deviation of the bootstrap estimates is the estimated standard
13 error. The lower 5th and upper 95th percentiles of the 5000 bootstrap estimates are estimates of
14 the lower limit and upper limit of 90% confidence intervals.

15 Nocturnal Migrant and Bat Fatalities

16 Differences in observed nocturnal migrant and bat fatality rates for lit turbines, unlit
17 turbines that are adjacent to lit turbines and unlit turbines that are not adjacent to lit turbines will
18 be compared graphically and statistically.

19 Mitigation

20 Mitigation may be appropriate if fatality rates exceed a “threshold of concern.” For the
21 purpose of determining whether a threshold has been exceeded, the certificate holder shall
22 calculate the average annual fatality rates for species groups after two years of monitoring. Based
23 on current knowledge of the species that are likely to use the habitat in the area of the facility, the
24 following thresholds apply to the facility:

Species Group	Threshold of Concern (fatalities per MW)
Raptors (All eagles, hawks, falcons and owls, including burrowing owls.)	0.09
Raptor species of special concern (Swainson’s hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing owl and any federal threatened or endangered raptor species.)	0.06
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59
State sensitive avian species listed under OAR 635-100-0040 (Excluding raptors listed above.)	0.2
Bat species as a group	2.5

25 If the data show that a threshold of concern for a species group has been exceeded, the
26 certificate holder shall implement additional mitigation if the Department determines that
27 mitigation is appropriate based on analysis of the data, consultation with ODFW and
28 consideration of any other significant information available at the time. In addition, the
29 Department may determine that mitigation is appropriate if fatality rates for individual avian or

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 bat species (especially State Sensitive Species) are higher than expected and at a level of
2 biological concern. If the Department determines that mitigation is appropriate, the certificate
3 holder, in consultation with the Department and ODFW, shall propose mitigation measures
4 designed to benefit the affected species. The certificate holder shall implement mitigation as
5 approved by the Council. The Department may recommend additional, targeted data collection if
6 the need for mitigation is unclear based on the information available at the time. The certificate
7 holder shall implement such data collection as approved by the Council.

8 Mitigation should be designed to benefit the affected species group. Mitigation may
9 include, but is not limited to, protection of nesting habitat for the affected group of native species
10 through a conservation easement or similar agreement. Tracts of land that are intact and
11 functional for wildlife are preferable to degraded habitat areas. Preference should be given to
12 protection of land that would otherwise be subject to development or use that would diminish the
13 wildlife value of the land. In addition, mitigation measures might include: enhancement of the
14 protected tract by weed removal and control; increasing the diversity of native grasses and forbs;
15 planting sagebrush or other shrubs; constructing and maintaining artificial nest structures for
16 raptors; improving wildfire response; and conducting or making a contribution to research that
17 will aid in understanding more about the affected species and its conservation needs in the
18 region.

19 **Raptor Nest Surveys**

20 The objectives of raptor nest surveys are: (1) to estimate the size of the local breeding
21 populations of raptor species that nest on the ground or aboveground in trees or other
22 aboveground nest locations in the vicinity of the facility; and (2) to determine whether operation
23 of the facility results in a reduction of nesting activity or nesting success in the local populations
24 of the following raptor species: Swainson's hawk, golden eagle, ferruginous hawk and burrowing
25 owl.

26 **Survey Protocol**

27 • *For Raptor Species that Nest Aboveground*

28 The certificate holder shall use aerial and ground surveys to evaluate nest success by
29 gathering data on active nests, on nests with young and on young fledged. The certificate holder
30 will share the data with state and federal biologists. For each phase of the facility, the certificate
31 holder shall conduct the first year of post-construction raptor nest surveys in the first raptor
32 nesting season after construction of that phase is completed. The second year of surveys will be
33 done in the fourth year after construction is completed. Thereafter, the certificate holder shall
34 conduct raptor nest surveys as described in Section 2(d) below.

35 During each survey year, the certificate holder will conduct a minimum of one helicopter
36 survey in late May or early June and additional surveys as described in this section. All nests
37 discovered during pre-construction surveys and any nests discovered during post-construction
38 surveys, whether active or inactive, will be given identification numbers. Nest locations will be
39 recorded on U.S. Geological Survey 7.5-minute quadrangle maps. Global positioning system
40 coordinates will be recorded for each nest. Locations of inactive nests will be recorded because
41 they could become occupied during future years.

42 The certificate holder shall conduct the aerial surveys within the site and a 2-mile buffer
43 around the site to determine nest occupancy. Determining nest *occupancy* will likely require two

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 helicopter visits to each nest. For occupied nests, the certificate holder shall determine nesting
2 *success* by a minimum of one ground visit to determine species, number of young and young
3 fledged. "Nesting success" means that the young have successfully fledged (the young are
4 independent of the core nest site). Nests that cannot be monitored due to the landowner denying
5 access will be checked from a distance where feasible.

6 • For Burrowing Owls

7 If burrowing owl nest sites are discovered, the certificate holder will monitor them
8 according to the following protocol. This species is not easily detected during aerial raptor nest
9 surveys. The certificate holder shall record active burrowing owl nest sites in the vicinity of the
10 facility as they are discovered during other wildlife monitoring tasks. Any nests discovered
11 during post-construction surveys, whether active or showing signs of intermittent use by the
12 species, will be given identification numbers. Nest locations will be recorded on U.S. Geological
13 Survey 7.5-minute quadrangle maps. Global positioning system coordinates will be recorded for
14 each nest site. Coordinates for ancillary burrows used by one nesting pair or a group of nesting
15 pairs will also be recorded. Locations of inactive nests will be recorded because they could
16 become occupied during future years.

17 The certificate holder shall conduct burrowing owl monitoring in the same years as the
18 raptor nest surveys described above. For occupied nests, the certificate holder shall determine
19 nesting *success* by a minimum of one ground visit to determine species, number of young and
20 young fledged. "Nesting success" means that the young have successfully fledged (the young
21 may or may not be independent of the core nest site). Three visits to the nest sites may be
22 necessary to determine outcome. Nests that cannot be monitored due to the landowner denying
23 access will be checked from a distance where feasible.

24 If burrowing owl nests are discovered during the first year of post-construction raptor
25 nest surveys (the first raptor nesting season after construction is completed), the certificate holder
26 shall monitor those nest locations during the second year of surveys in the fourth year after
27 construction is completed. Thereafter, the certificate holder shall monitor all known burrowing
28 owl nest locations as a part of the long-term raptor nest monitoring program described in Section
29 2(d) below.

30 **Analysis**

31 For each phase of the facility, the certificate holder shall analyze the raptor nesting data
32 collected after two survey years to determine whether a reduction in either nesting success or
33 nest use has occurred in the vicinity of the facility. If the analysis indicates a reduction in nesting
34 success or nest use by Swainson's hawks, golden eagles, ferruginous hawks or burrowing owls
35 within the facility site or within 2 miles of the facility site, then the certificate holder shall
36 propose appropriate mitigation for the affected species as described in Section 2© and shall
37 implement mitigation as approved by the Council. At a minimum, if the analysis shows that any
38 raptors of these species have abandoned a nest territory within the facility site or within ½ mile
39 of the facility site or has not fledged any young over the two survey years within that same area,
40 the certificate holder shall assume the abandonment or unsuccessful fledging is due to operation
41 of the facility unless another cause can be demonstrated convincingly.

42 Any reduction in nesting success or nest use could be due to operation of the facility,
43 operation of another wind facility in the vicinity or some other cause. The certificate holder shall

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 attribute the reduction to operation of the if the wind turbine closest to the affected nest site is an
2 LJF turbine, unless the certificate holder demonstrates, and the Department agrees, that the
3 reduction was due to a different cause.

4 Given the low raptor nesting densities in the area and the presence of other wind energy
5 facilities nearby, statistical power to detect a relationship between distance from an wind turbine
6 and nesting parameters (e.g., number of fledglings per reproductive pair) will be very low.
7 Therefore, impacts may have to be judged based on trends in the data, results from other wind
8 energy facility monitoring studies and literature on what is known regarding the populations in
9 the region.

10 Mitigation

11 The certificate holder shall propose mitigation for the affected species in consultation
12 with the Department and ODFW and shall implement mitigation as approved by the Council. In
13 proposing appropriate mitigation, the certificate holder shall advise the Department if any other
14 wind project in the area is obligated to provide mitigation for a reduction in raptor nesting
15 success at the same nest site. Mitigation should be designed to benefit the affected species or
16 contribute to overall scientific knowledge and understanding of what causes nest abandonment or
17 nest failure. Mitigation may be designed to proceed in phases over several years. It may include,
18 but is not limited to, additional raptor nest monitoring, protection of natural nest sites from
19 human disturbance or cattle activity (preferably within the general area of the facility) or
20 participation in research projects designed to improve scientific understanding of the needs of the
21 affected species.

22 Long-term Raptor Nest Monitoring and Mitigation Plan

23 In addition to the two years of post-construction raptor nest surveys described in Section
24 2(a), the certificate holder shall conduct long-term raptor nest surveys at five-year intervals for
25 the life of the facility.⁹⁹ The certificate holder shall conduct the first long-term raptor nest survey
26 in the ninth year after construction is completed. In conducting long-term surveys, the certificate
27 holder shall follow the same survey protocols as described above in Section 2(a) unless the
28 certificate holder proposes an alternative protocol that is approved by the Department. In
29 developing an alternative protocol, the certificate holder shall consult with ODFW.

30 The certificate holder shall analyze the raptor nesting data collected after each year of
31 long-term raptor nest surveys to determine whether a reduction in either nesting success or nest
32 use has occurred in the vicinity of the facility. If the analysis indicates a reduction in nesting
33 success or nest use by Swainson's hawks, golden eagles, ferruginous hawks or burrowing owls
34 within the facility site or within 2 miles of the facility site, then the certificate holder shall
35 propose appropriate mitigation for the affected species as described in Section 2© and shall
36 implement mitigation as approved by the Council. At a minimum, if the analysis shows that any
37 raptors of these species have abandoned a nest territory within the facility site or within ½ mile
38 of the facility site or has not fledged any young over the two survey years within that same area,
39 the certificate holder shall assume the abandonment or unsuccessful fledging is due to operation
40 of the facility unless another cause can be demonstrated convincingly.

⁹⁹ As used in this plan, "life of the facility" means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 Any reduction in nesting success or nest use could be due to operation of the facility,
2 operation of another wind facility in the vicinity or some other cause, including changes in land
3 use patterns after construction of the facility. The certificate holder shall attribute the reduction
4 to operation of if the wind turbine closest to the affected nest site is an turbine unless the
5 certificate holder demonstrates, and the Department agrees, that the reduction was due to a
6 different cause.

7 Given the low raptor nesting densities in the area and the presence of other wind energy
8 facilities nearby, statistical power to detect a relationship between distance from an wind turbine
9 and nesting parameters (e.g., number of fledglings per reproductive pair) will be very low.
10 Therefore, impacts may have to be judged based on trends in the data, results from other wind
11 energy facility monitoring studies and literature on what is known regarding the populations in
12 the region.

13 **Washington ground squirrel surveys**

14 For the LJIIA area, the certificate holder shall conduct long-term post-construction
15 surveys to collect data on Washington ground squirrel (WGS) activity within the lease boundary.
16 A qualified professional biologist will monitor the WGS sites in the LJIIA area identified during
17 the pre-construction surveys (2005 through 2007) and the buffer area within 500 feet in all
18 directions from the identified WGS sites in suitable habitat. The certificate holder shall conduct
19 surveys during the year following construction and every three years thereafter for the life of the
20 facility. Surveyors will walk standard protocol-level transects twice between late March and late
21 May and record level of use, notes on natal sites and physical extent of the sites. Details of the
22 post-construction WGS monitoring for the LJIIA area are set forth in the Incidental Take Permit
23 application as set forth in Attachment E of the Final Order on the Application.

24 An Incidental Take Permit is not required for the LJIIB area. Biologists conducting other
25 monitoring of the LJIIB area (including the fatality monitoring and raptor nest surveys described
26 above) will make note of any WGS activity they observe and will report the incidental
27 observations, including mapping and dates of the observations. In conjunction with the raptor
28 nest surveys for LJIIB described above, a qualified professional biologist (investigator) will
29 assess the status of colonies 13, 14, 15a, 15b, 16, 17, 22a, 22b, 23, and 24 (identified in the
30 Request for Amendment #1, Attachment 7, Figure 6b-3). The WGS assessments will occur
31 during the active WGS periods in the first and fourth years of operation and every five years
32 thereafter for the life of the project. The investigator shall record evidence of WGS
33 activity, current land use and evidence of project-caused conditions that might increase erosion
34 or result in a decline in vegetation quality and adversely affect a WGS colony.

35 **Grassland Bird Study**

36 The grassland bird study is a 2-year, post-construction evaluation of grassland bird use in
37 the LJF area. Parts of the facility occupy native habitat suitable for various ground-nesting bird
38 species that nest in grassland or open low shrub habitat. Grassland birds that were documented
39 on-site during baseline surveys conducted in 2006 included long-billed curlew, grasshopper
40 sparrow, savannah sparrow, Western meadowlark and horned lark. These species are likely to
41 nest on-site. Loggerhead shrikes may be present in the area but were not observed.

42 During the 2006 pre-construction surveys of the northern area of the, the applicant
43 surveyed 57 transects. The transects were approximately 60-meters wide. They were searched

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 twice during the peak period of activity for the target species (March through May). Locations of
2 territorial male grasshopper sparrows were recorded with a GPS unit. GPS locations of
3 (assumed) paired long-billed curlews or approximate location of the pair's primary activity area
4 and locations of curlew nests were also recorded. Surveyors made notes on the general location
5 of special status grassland bird species observed in the area and on any observed behavior (for
6 example, nesting, staging, courtship, non-breeders foraging in loose groups).¹⁰⁰ The surveyors
7 noted detections of common species in blocks of areas surveyed (several transects combined) but
8 did not record GPS locations or count the number of individuals present.

9 The objective of the post-construction grassland bird study is to determine if there are
10 noticeable changes in the presence and overall use by special status grassland bird species
11 compared to pre-construction data collected in 2006. By surveying a large area that includes the
12 undisturbed area between turbine strings, the study could provide information on whether
13 operation of the facility discourages use of the area by two indicator species: grasshopper
14 sparrows and long-billed curlews. In addition to focusing on the two indicator species, the post-
15 construction surveys will include observations of common species such as western meadowlark,
16 savannah sparrow and horned lark to provide information on the presence and distribution of
17 these species within the study area and their behavior relative to turbine locations. The phrase
18 "behavior relative to turbine locations" is intended to address observations of behavior that is
19 different near turbines compared behavior away from turbines.

20 Study Area

21 The study area is located within the LJIIA area and covers approximately 1,362 acres.¹⁰¹
22 For purposes of this discussion, the area north of Rattlesnake Road is referred to as the "north
23 study area," and the area south of the road is referred to as the "south study area."

24 The north study area is bounded by the lease boundary on the northeast and west sides
25 and by Rattlesnake Road on the southeast side. The south study area is bounded by an existing
26 power line on the west and natural topography on the other sides. The north study area contains
27 two proposed turbine strings of up to eight turbines and associated access roads and transmission
28 components. The south study area contains proposed access roads and five turbines. The south
29 study area might include burrowing owl dens, but no confirmed nests were discovered in the
30 baseline surveys. The habitat in the north study area is primarily shrub-steppe with grassland-like
31 vegetation in a recovery stage (it is assumed that fire disturbance has removed areas of mature
32 shrubs). The south study area includes relatively flat ground with some gentle slopes and a dry
33 drainage. The habitat in the south study area is similar to the habitat in the north study area and is
34 relatively open grassland with some shrubs. Habitat for both the north and south study areas is
35 not highly variable and is representative of a large portion of the remainder of the North lease
36 area. Areas containing laydown areas and unsuitable habitat will not be studied.

37 The study areas were selected because they are somewhat removed from human activity
38 (except low traffic use on facility access roads and one county road) and contain a large area of
39 grassland/shrub-steppe habitat (mapped as habitat sub-type "SSB") that is not proposed to be
40 altered during project construction or operations.

¹⁰⁰ As used in this section, "special status grassland bird species" means grasshopper sparrows, long-billed curlews, loggerhead shrikes and burrowing owls.

¹⁰¹ The study area and its underlying habitat types are shown on "Figure 1: Areas to be studied for Grassland Birds during Operations Phase" (Response to Additional RAI, Attachment 2, October 2, 2009).

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 Survey Protocol

2 After completion of construction of the facility, the certificate holder shall survey the 57
3 transects that were searched before construction in 2006. Surveyors will collect data on the
4 indicator species (grasshopper sparrows and long-billed curlews) and other special status
5 grassland bird species. For all special status grassland bird species observed, the surveyors will
6 record the number of observations of these species and their GPS locations, using the same
7 methodology used in 2006. Special status grassland bird species that fly readily in the surveyor's
8 presence will be tracked visually to attempt to determine defended territories and to limit
9 potential double-counting of individuals. Surveyors will record notes on the general location and
10 behavior of special status grassland bird species (for example, defensive responses, nesting,
11 staging, courtship, non-breeders foraging in loose groups). This plotted data will provide
12 information on the location of special status grassland bird species at distances near and far from
13 turbines and other facilities.

14 Surveyors will record notes on the location and abundance of common species. Abundant
15 common species that fly readily in the surveyor's presence will be tracked visually to avoid
16 double counting. Horned lark observations will be totaled for each survey area completed in one
17 survey day. The data on the relative abundance and distribution of common species will provide
18 information on the location of common species at distances near and far from turbines and other
19 facilities.

20 The certificate holder shall conduct the first year of post-construction grassland surveys
21 in the first spring following the beginning of commercial operation of the facility. The certificate
22 holder shall conduct a second year of grassland surveys two to five years after the first survey.
23 The certificate holder will determine when the second survey will be done, in consultation with
24 ODFW and subject to approval by the Department, based on the restoration of grassland cover in
25 areas disturbed during facility construction.

26 In each survey year, surveyors will complete two walking transect surveys of the north
27 and south study areas (one in April and one in May). A third visit to specific potential burrowing
28 owl dens (based on 2006 data and any newly discovered sites) will be conducted during the
29 period from late May to early July, if the surveyor determines a third visit is needed to confirm
30 use by burrowing owls. The April and May time period includes the seasonal period of staging
31 (pre-nesting) of long-billed curlews (April), the major period of territorial calling of grasshopper
32 sparrows (May) and the nesting period for long-billed curlews and other species (May).

33 Data Analysis and Reporting

34 After the first survey year, the certificate holder shall submit a preliminary summary
35 report to the Department. After the second survey year, the certificate holder shall submit a more
36 comprehensive final report. The certificate holder shall submit maps for each survey year,
37 showing transects walked and specific areas of use by the indicator species, other special status
38 grassland bird species and common species (except horned larks). The certificate holder shall
39 overlay a grid system on the mapped "as-built" locations of facility components within the study
40 areas. Using the grid system, the certificate holder shall describe the survey results by area and
41 distance from turbines.

42 The reports will include a description of vegetation compared to pre-construction
43 conditions as recorded in 2006, including notes on any changes in land use by the landowner,

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan

[JUNE 21, 2013]

1 wildfire influences and grazing and noting any areas of intense vegetation impact. Vegetation
2 communities will be sampled by the transect method and a description of plant communities will
3 be provided for each survey year.

4 The certificate holder shall report on observed changes in use by the indicator species.
5 For example, the report will compare the locations and numbers of grasshopper sparrows plotted
6 during the pre-construction surveys in the north study area to the locations and numbers of this
7 species plotted during the post-construction survey years. The certificate holder shall report on
8 the location of any burrowing owls observed during the transect searches or subsequent visits
9 made to confirm use. The certificate holder shall analyze the locations for all special status
10 grassland bird species (using GPS data) and common species (except horned larks) to calculate
11 distance from turbines or other facilities.¹⁰²

12 The certificate holder shall evaluate the data to determine if there are changes in the use
13 of the study areas by the two indicator species before and after construction. In addition, the
14 certificate holder shall evaluate the data to determine if there is noticeable difference in the
15 distribution, abundance or behavior of special status grassland bird species or common species
16 relative to turbine locations.

17 **Wildlife Reporting and Handling System**

18 The Wildlife Reporting and Handling System (WRHS) is a monitoring program to search
19 for and handle avian and bat casualties found by maintenance personnel during operation of the
20 facility. Maintenance personnel will be trained in the methods needed to carry out this program.
21 This monitoring program includes the initial response, the handling and the reporting of bird and
22 bat carcasses discovered incidental to maintenance operations (“incidental finds”).

23 All avian and bat carcasses discovered by maintenance personnel will be photographed
24 and the data recorded as would be done for carcasses within the formal search sample during
25 scheduled searches. If maintenance personnel discover incidental finds, the maintenance
26 personnel will notify a project biologist. The project biologist must be a qualified independent
27 professional biologist who is not an employee of the certificate holder. The project biologist (or
28 the project biologist’s experienced wildlife technician) will collect the carcass or will instruct
29 maintenance personnel to have an on-site carcass handling permittee collect the carcass. The
30 certificate holder’s on-site carcass handling permittee must be a person who is listed on state and
31 federal scientific or salvage collection permits and who is available to process (collect) the find
32 on the day it is discovered. The find must be processed on the same day as it is discovered.

33 During the years in which fatality monitoring occurs, if maintenance personnel discover
34 incidental finds outside the search plots for the fatality monitoring searches, the data will be
35 reported separately from fatality monitoring data. If maintenance personnel discover carcasses
36 within search plots, the data will be included in the calculation of fatality rates. The maintenance
37 personnel will notify a project biologist. The project biologist will collect the carcass or will
38 instruct maintenance personnel to have an on-site carcass handling permittee collect the carcass.
39 As stated above, the on-site permittee must be available to process the find on the day it is
40 discovered. The certificate holder shall coordinate collection of state endangered, threatened,
41 sensitive or other state protected species with ODFW. The certificate holder shall coordinate

¹⁰² Data on common species cannot be compared to preconstruction data because the 2006 surveys did not record the location or abundance of these species by transect line. GPS data will not be collected for common species.

Leaning Juniper IIB Wildlife Monitoring and Mitigation Plan
[JUNE 21, 2013]

1 collection of federally-listed endangered or threatened species and Migratory Bird Treaty Act
2 protected avian species with the USFWS.

3 **Data Reporting**

4 The certificate holder will report wildlife monitoring data and analysis to the Department.
5 Monitoring data include fatality monitoring program data, raptor nest survey data, WGS survey
6 data for the LJIIA area, WGS incidental observation and assessment reports for the LJIIB area,
7 grassland bird study data and WRHS data. The certificate holder may include the reporting of
8 wildlife monitoring data and analysis in the annual report required under OAR 345-026-0080 or
9 submit this information as a separate document at the same time the annual report is submitted.
10 In addition, the certificate holder shall provide to the Department any data or record generated in
11 carrying out this monitoring plan upon request by the Department.

12 The certificate holder shall notify USFWS and ODFW immediately if any federal or state
13 endangered or threatened species are killed or injured on the facility site.

14 The public will have an opportunity to receive information about monitoring results and
15 to offer comment. Within 30 days after receiving the final versions of reports that are required
16 under this plan, the Department will make the reports available to the public on its website and
17 will specify a time in which the public may submit comments to the Department.¹⁰³

18 **Amendment of the Plan**

19 This Wildlife Monitoring and Mitigation Plan may be amended from time to time by
20 agreement of the certificate holder and the Council. Such amendments may be made without
21 amendment of the site certificate. The Council authorizes the Department to agree to
22 amendments to this plan and to mitigation actions that may be required under this plan. The
23 Department shall notify the Council of all amendments and mitigation actions, and the Council
24 retains the authority to approve, reject or modify any amendment of this plan or mitigation action
25 agreed to by the Department.

26

¹⁰³ The certificate holder may establish a Technical Advisor Committee (TAC) but is not required to do so. If the certificate holder establishes a TAC, the TAC may offer comments to the Council about the results of the monitoring required under this plan.

Attachment E

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

I. INTRODUCTION

This plan describes methods and standards for preservation and enhancement of an area of land near the Leaning Juniper IIA Wind Power Facility to mitigate for the impacts of the facility on wildlife habitat.¹⁰⁴ This plan addresses mitigation for both the permanent impacts of facility components and the temporal impacts of facility construction. The certificate holder shall protect and enhance the mitigation area as described in this plan. This plan specifies habitat enhancement actions and monitoring procedures to evaluate the success of those actions. Remedial action may be necessary if progress toward habitat enhancement success is not demonstrated in any part of the mitigation area.

Per Amendment 2 to Leaning Juniper II Wind Power Facility, the facility was divided into two separate facilities with LJIIA and LJIIB each receiving its own site certificates. However, the site certificate holders agreed to share mitigation and environmental responsibilities. Therefore, the requirements for the facility as a whole, including both LJIIA and LJIIB, remain in this Habitat Mitigation Plan and each individual site certificate holder remains bound by its terms.

II. DESCRIPTION OF THE IMPACTS ADDRESSED BY THE PLAN

The estimated land area that could be occupied by permanent facility components (the “footprint”) is approximately 111 acres, based on the final design configuration for LJIIA and the expected configuration for LJIIB.¹⁰⁵ In addition to the footprint impacts, construction of the facility could disturb approximately 850 acres. Although much of the area is cropland, habitat that could be affected by construction disturbance includes areas of perennial bunchgrass, desirable shrubs and juniper trees. After disturbance, the recovery of perennial bunchgrass species to a mature stage might take five to seven years; recovery of juniper trees and desirable shrubs such as bitterbrush and sagebrush might take ten to 30 years to reach maximum height and vertical branching. Even where recovery of these habitat subtypes is successful, there is a loss of habitat quality during the period of time needed to achieve recovery (temporal impact).

III. CALCULATION OF THE SIZE OF THE MITIGATION AREA

The actual footprint and construction disturbance areas cannot be determined until the final design layout of the facility is known. Before beginning construction of any phase the facility, the certificate holder shall provide to the Oregon Department of Energy (Department) a map showing the final design configuration of that phase and a table showing the estimated areas of permanent impacts and construction area impacts on habitat (by category, habitat types and habitat subtypes) in that phase. The certificate holder shall calculate the size of the mitigation area, as illustrated below, based on the final design configuration of the facility. The certificate holder shall implement the habitat enhancement actions described in this plan, after the Department has approved the size of the mitigation area. This plan does not address additional

¹⁰⁴ This plan is incorporated by reference in the site certificate for the Leaning Juniper II Wind Power Facility and must be understood in that context. It is not a “stand-alone” document. This plan does not contain all mitigation required of the certificate holder.

¹⁰⁵ The LJIIA and LJIIB areas are described in the *Final Order on Amendment #1*. The expected acres of permanent impact for LJIIA are shown in Table 6 of the Final Order. The acres of permanent impact for LJIIB are shown in Table 7.

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

1 mitigation that might be required under the Leaning Juniper IIA Wildlife Monitoring and
2 Mitigation Plan.

3 The mitigation area must be large enough to meet the habitat mitigation goals and
4 standards of the Oregon Department of Fish and Wildlife (ODFW) described in OAR 635-415-
5 0025. The ODFW goals require mitigation to achieve “no net loss” of habitat in Categories 2, 3
6 and 4 and a “net benefit” in habitat quantity or quality for impacts to habitat in Categories 2 and
7 5.

8 For the footprint impacts, the mitigation area includes two acres for every one acre of
9 Category 2 habitat affected (a 2:1 ratio) and one acre for every acre of footprint impacts to
10 Category 3, 4 and 5 habitat (a 1:1 ratio). The 2:1 ratio for Category 2 is intended to meet the
11 ODFW goals of “no net loss” of Category 2 habitat and “net benefit” of habitat quantity for
12 impacts to both Category 2 and Category 5 habitat. The 1:1 ratio for the footprint impacts to
13 Category 3, 4 and 5 habitat is intended to meet the ODFW goal of “no net loss” of habitat in
14 these categories.

15 To mitigate for construction impacts outside the footprint, the mitigation area includes $\frac{1}{2}$
16 acre for every Category 2 or 3 SSA (shrub-grass; sagebrush-rabbitbrush-snakeweed/bunchgrass-
17 annual grass), SSE (bitterbrush-buckwheat-bunchgrass-annual grass) and WJ (juniper woodland)
18 habitat affected (a 0.5:1 ratio). This portion of the mitigation area is intended to address the
19 temporal loss of habitat quality during the recovery of SSA, SSE and WJ habitat disturbed during
20 construction. The size of this portion of the mitigation area is based on the assumption that
21 restoration of disturbed SSA, SSE and WJ habitat is successful, as determined under the Leaning
22 Juniper II Revegetation Plan. If the revegetation success criteria are not met in the affected areas,
23 then the Council may require the certificate holder to provide additional mitigation.

24 For the first phase of the facility (LJIIA), the areas of impact within each affected habitat
25 category and the corresponding mitigation area for each category are calculated as follows, based
26 on the final design habitat assessment.

27 Category 2

28 Footprint impacts: 6.28 acres

29 Temporal impacts to SSA and SSE: 18.19 acres

30 Mitigation area: $(6.28 \text{ acres} \times 2) + (18.19 \text{ acres} \times 0.5) = 21.66 \text{ acres}$

31 Category 3

32 Footprint impacts: 13.48 acres

33 Temporal impacts to SSA: 1.8 acres

34 Mitigation area: $13.48 \text{ acres} + (1.8 \text{ acres} \times 0.5) = 14.38 \text{ acres}$

35 Category 4

36 Footprint impacts: 1.38 acres

37 Mitigation area: 2.1 acres

38 Category 5

39 Footprint impacts: 1.34 acres

40 Mitigation area: 1.34 acres

41 **Total mitigation area for LJIIA (rounded to nearest whole acre): 39 acres**

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

1 For the second phase of the facility (LJIIB), areas of potential impact within each
2 affected habitat category and the corresponding mitigation area for each category are calculated
3 as follows, based on maximum habitat impact estimates:¹⁰⁶

4 Category 2

5 Footprint impacts: 12.16 acres

6 Temporal impacts to SSA, SSE and WJ: 21.86 acres

7 Mitigation area: $(12.16 \text{ acres} \times 2) + (21.86 \text{ acres} \times 0.5) = 35.26 \text{ acres}$

8 Category 3

9 Footprint impacts: 16.07 acres

10 Temporal impacts to SSA: 0.31 acres

11 Mitigation area: $16.07 \text{ acres} + (0.31 \text{ acres} \times 0.5) = 16.23 \text{ acres}$

12 Category 4

13 Footprint impacts: 1.44 acres

14 Mitigation area: 1.44 acres

15 **Total mitigation area for LJIIB (rounded to nearest whole acre): 53 acres**

16 **IV. DESCRIPTION OF THE MITIGATION AREA**

17 The certificate holder shall select a mitigation area in proximity to the facility where
18 habitat protection and enhancement are feasible consistent with this plan.¹⁰⁷ The applicant
19 identified a 440-acre parcel in a relatively remote setting where habitat protection and
20 enhancement are feasible and sufficient land area is available to accommodate the size of the
21 mitigation area, based on a worst-case estimate.¹⁰⁸ Before beginning construction of any phase of
22 the facility, the certificate holder shall determine the final size of the mitigation area needed for
23 that phase. The certificate holder shall determine the boundaries of the mitigation area in
24 consultation with ODFW and the affected landowners and subject to the approval of the
25 Department. The final mitigation area must contain suitable habitat to achieve the ODFW goals
26 of no net loss of habitat in Categories 2, 3 and 4 and a net benefit in habitat quantity or quality
27 for impacts to habitat in Categories 2 and 5 through appropriate enhancement actions. Before
28 beginning construction of any phase of the facility, the certificate holder shall acquire the legal
29 right to create, maintain and protect the habitat mitigation area needed for that phase for the life
30 of the facility by means of an outright purchase, conservation easement or similar conveyance
31 and shall provide a copy of the documentation to the Department.¹⁰⁹

32 **V. HABITAT ENHANCEMENT ACTIONS**

33 The objectives of habitat enhancement are to protect habitat within the mitigation area from
34 degradation and to improve the habitat quality of the mitigation area. By achieving these goals,

¹⁰⁶ The maximum impact estimates are shown in Table 8 of the *Final Order on Amendment #1*.

¹⁰⁷ OAR 635-415-0005 defines "in-proximity habitat mitigation" as follows: "habitat mitigation measures undertaken within or in proximity to areas affected by a development action. For the purposes of this policy, 'in proximity to' means within the same home range, or watershed (depending on the species or population being considered) whichever will have the highest likelihood of benefiting fish and wildlife populations directly affected by the development."

¹⁰⁸ The 440-acre parcel is described in Section IV.4.(b)(F) of the Final Order on the Application.

¹⁰⁹ As used in this plan, "life of the facility" means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

1 the certificate holder can address the permanent and temporal habitat impacts of the facility and
2 meet the ODFW goals of no net loss of habitat in Categories 2, 3 and 4 and a net benefit in
3 habitat quantity or quality for impacts to habitat in Categories 2 and 5. The certificate holder
4 shall initiate the habitat enhancement actions for each phase of the facility as soon as the final
5 design configuration of the that phase is known and the size of the mitigation area has been
6 determined and approved by the Department. The certificate holder shall implement the
7 following enhancement actions:

- 8 1) Modification of Livestock Grazing Practices. The certificate holder shall restrict grazing
9 within the habitat mitigation area. Eliminating livestock grazing within the mitigation
10 area during most of the year will enable recovery of native bunchgrass and sagebrush in
11 areas where past grazing has occurred, resulting in better vegetative structure and
12 complexity for a variety of wildlife. Reduced livestock grazing may be used as a
13 vegetation management tool, limited to the period from February 1 through April 15.
- 14 2) Shrub Planting. The certificate holder shall plant sagebrush shrubs in locations where
15 existing sagebrush is stressed. The certificate holder shall determine the size of the shrub-
16 planting area based on the professional judgment of a qualified biologist after a ground
17 survey of actual conditions. The size of the shrub-planting area will depend on the
18 available mitigation area and opportunity for survival of planted shrubs. The shrub
19 survival rate at four years after planting is an indicator of successful enhancement of
20 habitat quality to Category 2. Accordingly, although a minimum 5-acre area of shrub
21 planting is anticipated, the certificate holder may choose to plant a larger area. The
22 certificate holder shall complete the initial sagebrush planting within one year after the
23 beginning of construction of the facility. Supplementing existing but disturbed sagebrush
24 areas with sagebrush seedlings would assist the recovery of this valuable shrub-steppe
25 component. The certificate holder shall obtain shrubs from a qualified nursery or grow
26 shrubs from native seeds gathered from the mitigation area. The certificate holder shall
27 identify the area to be planted with sagebrush shrubs after consultation with ODFW and
28 subject to final approval by the Department. The certificate holder shall mark the planted
29 sagebrush clusters at the time of planting for later monitoring purposes and shall keep a
30 record of the number of shrubs planted.
- 31 3) Tree Planting. If areas of juniper woodland are disturbed during construction, the
32 certificate holder shall plant juniper trees in the mitigation area in locations of deeper
33 soils near canyon bottoms. The certificate holder shall assess specific locations and
34 provide a map of possible planting locations to ODFW and the Department before
35 planting begins. The certificate holder shall determine the number and size of the juniper
36 tree plants based on the professional judgment of a qualified biologist after a ground
37 survey of actual conditions. The size of the tree-planting area will depend on the
38 available mitigation area and opportunity for survival of planted trees. The tree survival
39 rate at four years after planting is an indicator of successful enhancement of habitat
40 quality to Category 2. The certificate holder shall obtain trees from a qualified nursery or
41 suitable transplants from LJIIB construction zones. The certificate holder shall identify
42 the area to be planted with juniper trees after consultation with ODFW and subject to
43 final approval by the Department. The certificate holder shall mark the planted trees at
44 the time of planting for later monitoring purposes and shall keep a record of the number
45 of trees planted.

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

- 1 4) Weed Control. The certificate holder shall implement a weed control program. Under the
2 weed control program, the certificate holder shall monitor the mitigation area to locate
3 weed infestations. The certificate holder shall continue weed control monitoring, as
4 needed, for the life of the facility. As needed, the certificate holder shall use appropriate
5 methods to control weeds. Weed control on the mitigation site will reduce the spread of
6 noxious weeds within the habitat mitigation area and on any nearby grassland, CRP or
7 cultivated agricultural land. Weed control will promote the growth of desirable native
8 vegetation and planted sagebrush. The certificate holder may consider weeds to be
9 successfully controlled when weed clusters have been eradicated or reduced to a non-
10 competing level. Weeds may be controlled with herbicides or hand-pulling. The
11 certificate holder shall notify the landowner of the specific chemicals to be used on the
12 site and when spraying will occur. To protect locations where young desirable forbs may
13 be growing, spot-spraying may be used instead of total area spraying.
- 14 5) Fire Control. The certificate holder shall implement a fire control plan for wildfire
15 suppression within the mitigation area. The certificate holder shall provide a copy of the
16 fire control plan to the Department before starting habitat enhancement actions. The
17 certificate holder shall include in the plan appropriate fire prevention measures, methods
18 to detect fires that occur and a protocol for fire response and suppression. The certificate
19 holder shall maintain fire control for the life of the facility. If any part of the mitigation
20 area is damaged by wildfire, the certificate holder shall assess the extent of the damage
21 and implement appropriate actions to restore habitat quality in the damaged area.
- 22 6) Nest platforms. The certificate holder shall construct at least one artificial raptor nest
23 platform in the mitigation area tailored to the opportunities of the site, using best
24 professional judgment of raptor use in the general area. The certificate holder may
25 construct more than one nest platform based on the availability of suitable locations. The
26 certificate holder shall maintain the nest platforms for the life of the facility.
- 27 7) Habitat Protection. The certificate holder shall restrict uses of the mitigation area that are
28 inconsistent with the goals of no net loss of habitat in Categories 2, 3 and 4 and a net
29 benefit in habitat quantity or quality for impacts to habitat in Categories 2 and 5.

30 **VI. MONITORING**

31 **1. Monitoring Procedures**

32 The certificate holder shall hire a qualified investigator (an independent botanist, wildlife
33 biologist or revegetation specialist) to conduct a comprehensive monitoring program for the
34 mitigation area. The purpose of this monitoring is to evaluate on an ongoing basis the protection
35 of habitat quality, the results of enhancement actions and the use of the area by avian and
36 mammal species, especially during the wildlife breeding season.

37 The investigator shall monitor the habitat mitigation area for the life of the facility
38 beginning in the year following the initial sagebrush planting. The investigator shall visit the site
39 as necessary to carry out the following monitoring procedures:

- 40 1) Annually assess vegetation cover (species, structural stage, etc.) and progress toward
41 meeting the success criteria.
- 42 2) Annually record environmental factors (such as precipitation at the time of surveys
43 and precipitation levels for the year).

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

- 1 3) Annually record any wildfire that occurs within the mitigation area and any remedial
2 actions taken to restore habitat quality in the damaged area.
- 3 4) Annually assess the success of the weed control program and recommend remedial
4 action, if needed.
- 5 5) Assess the recovery of native bunchgrass and natural recruitment of sagebrush
6 resulting from removal of livestock grazing pressure by comparing the quality of
7 bunchgrass and sagebrush cover at the time of each monitoring visit with the quality
8 observed in previous monitoring visits and as observed when the mitigation area was
9 first established. The investigator shall establish photo plots of naturally recovering
10 sagebrush and native bunchgrass during the first year following the beginning of
11 construction of the facility. The investigator shall take comparison photos in the first
12 year and in every other year thereafter until the subject vegetation has achieved
13 mature stature. The investigator shall determine the extent of successful recovery of
14 native bunchgrass based on measurable indicators (such as, signs of more abundant
15 seed production) and shall report on the progress of recovery within in the monitoring
16 plots. The investigator shall report on the timing and extent of any livestock grazing
17 that has occurred within the mitigation area since the previous monitoring visit.
- 18 6) Assess the survival rate and growth of planted sagebrush. At the time of planting,
19 sagebrush clusters will be marked for the purpose of monitoring. The investigator
20 shall select several planted clusters for photo monitoring and shall take close-up and
21 long-distance digital images of each selected cluster during each monitoring visit. The
22 certificate holder shall determine the number of clusters to be photo-monitored at the
23 time of planting, in consultation with the Department and ODFW, based on the
24 number of clusters planted. The investigator shall take comparison photos in the first
25 year following the initial sagebrush planting and in every other year thereafter until
26 the surviving planted sagebrush has achieved mature stature. In each monitoring year,
27 the investigator shall determine and report the survival rate of planted sagebrush.
28 Based on past experience of restoration specialists for other sagebrush planting
29 projects, a survival rate as high as 50 percent can be achieved if there are years of
30 high soil moisture, but a more typical survival rate is 2 surviving shrubs per 10
31 planted (20 percent) after four years. Shrub-planting will be considered successful if a
32 20-percent survival rate is achieved after four years. The investigator shall
33 recommend remedial action when, in the investigator's judgment, the survival rate of
34 planted sagebrush is inadequate to demonstrate a trend toward an improvement in
35 habitat quality.
- 36 7) Assess the survival rate and growth of planted juniper trees. At the time of planting,
37 juniper trees will be marked for the purpose of monitoring. The investigator shall
38 select several planted trees for photo monitoring and shall take close-up and long-
39 distance digital images of each selected tree during each monitoring visit. The
40 certificate holder shall determine the number of trees to be photo-monitored at the
41 time of planting, in consultation with the Department and ODFW, based on the
42 number of trees planted. The investigator shall take comparison photos in the first
43 year following planting and in every other year thereafter until the surviving planted
44 trees have achieved mature stature. In each monitoring year, the investigator shall
45 determine and report the survival rate of planted trees and shall note overall vigor,

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

1 height of tree and the extent of branching. Based on past experience of restoration
2 specialists, one in five planted juniper trees may typically survive. Juniper planting
3 will be considered successful when, in the investigator's judgment, one in five have
4 survived. The investigator shall recommend remedial action when, in the
5 investigator's judgment, the survival rate is inadequate to demonstrate a trend toward
6 an improvement in habitat quality.

- 7 8) Between April 21 and May 21 beginning in the first spring season after the beginning
8 of construction of the facility, conduct an area search survey of avian species. An
9 "area search" survey consists of recording all birds seen or heard in specific areas (for
10 example, square or circular plots that are 5 to 10 acres in size). Area searches will be
11 conducted during morning hours on days with low or no wind. The investigator shall
12 determine the number searches and the number of search areas in consultation with
13 ODFW. The investigator shall repeat the area search survey every five years during
14 the life of the facility.
- 15 9) Beginning in the first year after the beginning of construction of the facility and
16 repeating every five years during the life of the facility, the investigator shall record
17 observations of special status plant or wildlife species (federal or state threatened or
18 endangered species and state sensitive species) during appropriate seasons for
19 detection of these species.

20 The certificate holder shall report the investigator's findings and recommendations
21 regarding the monitoring of the mitigation area to the Department and to ODFW on an annual
22 basis. In the annual report, the certificate holder shall describe all habitat mitigation actions
23 carried out during the reporting year. The report to the Department may be included as part of the
24 annual report on the facility.

25 **2. Success Criteria**

26 Mitigation of the permanent and temporal habitat impacts of the facility may be
27 considered successful if the certificate holder protects and enhances sufficient habitat within the
28 mitigation area to meet the ODFW goals of no net loss of habitat in Categories 2, 3 and 4 and a
29 net benefit in habitat quantity or quality for impacts to habitat in Categories 2 and 5. The
30 certificate holder must protect the quantity and quality of habitat within the mitigation area for
31 the life of the facility. ODFW has advised the Department that protection of habitat alone
32 (without enhancement activity) will not meet the intent of the "net benefit" goal.

33 The certificate holder must protect a sufficient quantity of habitat in each category to
34 meet the mitigation area requirements calculated under Section III based on the final design
35 configuration of each phase of the facility. The certificate holder shall determine the actual
36 mitigation area requirements for each phase, subject to Department approval, before beginning
37 construction of the that phase. If the land selected for the mitigation area does not already
38 contain sufficient habitat in each category to meet these requirements, then the certificate holder
39 must demonstrate improvement of habitat quality sufficient to change lower-value habitat to a
40 higher value (for example, to convert Category 3 habitat to Category 2). The certificate holder
41 may demonstrate improvement of habitat quality based on evidence of indicators such as
42 increased avian use by a diversity of species, survival of planted shrubs and juniper trees, more
43 abundant seed production of desirable native bunchgrass, natural recruitment of sagebrush and
44 successful weed control. If the certificate holder cannot demonstrate that the habitat mitigation

Leaning Juniper IIA Habitat Mitigation Plan
[JUNE 21, 2013]

1 area is trending toward the habitat quality goals described above within four years after the initial
2 sagebrush planting, the certificate holder shall propose remedial action. The Department may
3 require supplemental planting or other corrective measures.

4 After the certificate holder has demonstrated that the habitat quantity goals have been
5 achieved, the investigator shall verify, during subsequent monitoring visits, that the mitigation
6 area continues to meet the ODFW “no net loss” and “net benefit” goals described above. The
7 investigator shall recommend remedial action if the habitat quality within the mitigation area
8 falls below the habitat quantity goals listed above. The Department may require supplemental
9 planting, other corrective measures and additional monitoring as necessary to ensure that the
10 habitat quantity goals are achieved and maintained.

11 **VII. AMENDMENT OF THE PLAN**

12 This Habitat Mitigation Plan may be amended from time to time by agreement of the
13 certificate holder and the Oregon Energy Facility Siting Council (“Council”). Such amendments
14 may be made without amendment of the site certificate. The Council authorizes the Department
15 to agree to amendments to this plan. The Department shall notify the Council of all amendments,
16 and the Council retains the authority to approve, reject or modify any amendment of this plan
17 agreed to by the Department.

Leaning Juniper IIB Wind Project: Habitat Mitigation Plan
[JUNE 21, 2013]

1 **I. Introduction**

2 This plan describes methods and standards for preservation and enhancement of an area
3 of land near the Leaning Juniper IIB Wind Power Facility to mitigate for the impacts of the
4 facility on wildlife habitat.¹¹⁰ This plan addresses mitigation for both the permanent impacts of
5 facility components and the temporal impacts of facility construction. The certificate holder shall
6 protect and enhance the mitigation area as described in this plan. This plan specifies habitat
7 enhancement actions and monitoring procedures to evaluate the success of those actions.
8 Remedial action may be necessary if progress toward habitat enhancement success is not
9 demonstrated in any part of the mitigation area.

10 Per Amendment 2 to Leaning Juniper II Wind Power Facility, the facility was divided
11 into two separate facilities with LJIIA and LJIIB each receiving its own site certificates.
12 However, the site certificate holders agreed to share mitigation and environmental
13 responsibilities. Therefore, the requirements for the facility as a whole, including both LJIIA and
14 LJIIB, remain in this Habitat Mitigation Plan and each individual site certificate holder remains
15 bound by its terms.

16
17 **II. Description of the Impacts Addressed by the Plan**

18 The estimated land area that could be occupied by permanent facility components (the
19 “footprint”) is approximately 111 acres, based on the final design configuration for LJIIA and
20 the expected configuration for LJIIB.¹¹¹ In addition to the footprint impacts, construction of the
21 facility could disturb approximately 850 acres. Although much of the area is cropland, habitat
22 that could be affected by construction disturbance includes areas of perennial bunchgrass,
23 desirable shrubs and juniper trees. After disturbance, the recovery of perennial bunchgrass
24 species to a mature stage might take five to seven years; recovery of juniper trees and desirable
25 shrubs such as bitterbrush and sagebrush might take ten to 30 years to reach maximum height
26 and vertical branching. Even where recovery of these habitat subtypes is successful, there is a
27 loss of habitat quality during the period of time needed to achieve recovery (temporal impact).

28 **III. Calculation of the Size of the Mitigation Area**

29 The actual footprint and construction disturbance areas cannot be determined until the
30 final design layout of the facility is known. Before beginning construction of any phase the
31 facility, the certificate holder shall provide to the Oregon Department of Energy (Department) a
32 map showing the final design configuration of that phase and a table showing the estimated areas
33 of permanent impacts and construction area impacts on habitat (by category, habitat types and

¹¹⁰ This plan is incorporated by reference in the site certificate for the Leaning Juniper II Wind Power Facility and must be understood in that context. It is not a “stand-alone” document. This plan does not contain all mitigation required of the certificate holder.

¹¹¹ The LJIIA and LJIIB areas are described in the *Final Order on Amendment #1*. The expected acres of permanent impact for LJIIA are shown in Table 6 of the Final Order. The acres of permanent impact for LJIIB are shown in Table 7.

Leaning Juniper IIB Habitat Mitigation Plan
[JUNE 21, 2013]

1 habitat subtypes) in that phase. The certificate holder shall calculate the size of the mitigation
2 area, as illustrated below, based on the final design configuration of the facility. The certificate
3 holder shall implement the habitat enhancement actions described in this plan, after the
4 Department has approved the size of the mitigation area. This plan does not address additional
5 mitigation that might be required under the Leaning Juniper IIB Wildlife Monitoring and
6 Mitigation Plan.

7 The mitigation area must be large enough to meet the habitat mitigation goals and
8 standards of the Oregon Department of Fish and Wildlife (ODFW) described in OAR 635-415-
9 0025. The ODFW goals require mitigation to achieve “no net loss” of habitat in Categories 2, 3
10 and 4 and a “net benefit” in habitat quantity or quality for impacts to habitat in Categories 2 and
11 5.

12 For the footprint impacts, the mitigation area includes two acres for every one acre of
13 Category 2 habitat affected (a 2:1 ratio) and one acre for every acre of footprint impacts to
14 Category 3, 4 and 5 habitat (a 1:1 ratio). The 2:1 ratio for Category 2 is intended to meet the
15 ODFW goals of “no net loss” of Category 2 habitat and “net benefit” of habitat quantity for
16 impacts to both Category 2 and Category 5 habitat. The 1:1 ratio for the footprint impacts to
17 Category 3, 4 and 5 habitat is intended to meet the ODFW goal of “no net loss” of habitat in
18 these categories.

19 To mitigate for construction impacts outside the footprint, the mitigation area includes ½
20 acre for every Category 2 or 3 SSA (shrub-grass; sagebrush-rabbitbrush-snakeweed/bunchgrass-
21 annual grass), SSE (bitterbrush-buckwheat-bunchgrass-annual grass) and WJ (juniper woodland)
22 habitat affected (a 0.5:1 ratio). This portion of the mitigation area is intended to address the
23 temporal loss of habitat quality during the recovery of SSA, SSE and WJ habitat disturbed during
24 construction. The size of this portion of the mitigation area is based on the assumption that
25 restoration of disturbed SSA, SSE and WJ habitat is successful, as determined under the Leaning
26 Juniper II Revegetation Plan. If the revegetation success criteria are not met in the affected areas,
27 then the Council may require the certificate holder to provide additional mitigation.

28 For the first phase of the facility (LJIIA), the areas of impact within each affected habitat
29 category and the corresponding mitigation area for each category are calculated as follows, based
30 on the final design habitat assessment.

31 Category 2

32 Footprint impacts: 6.28 acres

33 Temporal impacts to SSA and SSE: 18.19 acres

34 Mitigation area: $(6.28 \text{ acres} \times 2) + (18.19 \text{ acres} \times 0.5) = 21.66 \text{ acres}$

35 Category 3

36 Footprint impacts: 13.48 acres

37 Temporal impacts to SSA: 1.8 acres

38 Mitigation area: $13.48 \text{ acres} + (1.8 \text{ acres} \times 0.5) = 14.38 \text{ acres}$

39 Category 4

40 Footprint impacts: 1.38 acres

41 Mitigation area: 2.1 acres

42 Category 5

43 Footprint impacts: 1.34 acres

Leaning Juniper IIB Habitat Mitigation Plan
[JUNE 21, 2013]

1 Mitigation area: 1.34 acres

2 **Total mitigation area for LJIIA (rounded to nearest whole acre): 39 acres**

3 For the second phase of the facility (LJIIB), areas of potential impact within each
4 affected habitat category and the corresponding mitigation area for each category are calculated
5 as follows, based on maximum habitat impact estimates:¹¹²

6 Category 2

7 Footprint impacts: 12.16 acres

8 Temporal impacts to SSA, SSE and WJ: 21.86 acres

9 Mitigation area: $(12.16 \text{ acres} \times 2) + (21.86 \text{ acres} \times 0.5) = 35.26 \text{ acres}$

10 Category 3

11 Footprint impacts: 16.07 acres

12 Temporal impacts to SSA: 0.31 acres

13 Mitigation area: $16.07 \text{ acres} + (0.31 \text{ acres} \times 0.5) = 16.23 \text{ acres}$

14 Category 4

15 Footprint impacts: 1.44 acres

16 Mitigation area: 1.44 acres

17 **Total mitigation area for LJIIB (rounded to nearest whole acre): 53 acres**

18 **IV. Description of the Mitigation Area**

19 The certificate holder shall select a mitigation area in proximity to the facility where
20 habitat protection and enhancement are feasible consistent with this plan.¹¹³ The applicant
21 identified a 440-acre parcel in a relatively remote setting where habitat protection and
22 enhancement are feasible and sufficient land area is available to accommodate the size of the
23 mitigation area, based on a worst-case estimate.¹¹⁴ Before beginning construction of any phase of
24 the facility, the certificate holder shall determine the final size of the mitigation area needed for
25 that phase. The certificate holder shall determine the boundaries of the mitigation area in
26 consultation with ODFW and the affected landowners and subject to the approval of the
27 Department. The final mitigation area must contain suitable habitat to achieve the ODFW goals
28 of no net loss of habitat in Categories 2, 3 and 4 and a net benefit in habitat quantity or quality
29 for impacts to habitat in Categories 2 and 5 through appropriate enhancement actions. Before
30 beginning construction of any phase of the facility, the certificate holder shall acquire the legal
31 right to create, maintain and protect the habitat mitigation area needed for that phase for the life
32 of the facility by means of an outright purchase, conservation easement or similar conveyance
33 and shall provide a copy of the documentation to the Department.¹¹⁵

¹¹² The maximum impact estimates are shown in Table 8 of the *Final Order on Amendment #1*.

¹¹³ OAR 635-415-0005 defines "in-proximity habitat mitigation" as follows: "habitat mitigation measures undertaken within or in proximity to areas affected by a development action. For the purposes of this policy, 'in proximity to' means within the same home range, or watershed (depending on the species or population being considered) whichever will have the highest likelihood of benefiting fish and wildlife populations directly affected by the development."

¹¹⁴ The 440-acre parcel is described in Section IV.4.(b)(F) of the Final Order on the Application.

¹¹⁵ As used in this plan, "life of the facility" means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

Leaning Juniper IIB Habitat Mitigation Plan
[JUNE 21, 2013]

V. Habitat Enhancement Actions

The objectives of habitat enhancement are to protect habitat within the mitigation area from degradation and to improve the habitat quality of the mitigation area. By achieving these goals, the certificate holder can address the permanent and temporal habitat impacts of the facility and meet the ODFW goals of no net loss of habitat in Categories 2, 3 and 4 and a net benefit in habitat quantity or quality for impacts to habitat in Categories 2 and 5. The certificate holder shall initiate the habitat enhancement actions for each phase of the facility as soon as the final design configuration of the that phase is known and the size of the mitigation area has been determined and approved by the Department. The certificate holder shall implement the following enhancement actions:

- 8) Modification of Livestock Grazing Practices. The certificate holder shall restrict grazing within the habitat mitigation area. Eliminating livestock grazing within the mitigation area during most of the year will enable recovery of native bunchgrass and sagebrush in areas where past grazing has occurred, resulting in better vegetative structure and complexity for a variety of wildlife. Reduced livestock grazing may be used as a vegetation management tool, limited to the period from February 1 through April 15.
- 9) Shrub Planting. The certificate holder shall plant sagebrush shrubs in locations where existing sagebrush is stressed. The certificate holder shall determine the size of the shrub-planting area based on the professional judgment of a qualified biologist after a ground survey of actual conditions. The size of the shrub-planting area will depend on the available mitigation area and opportunity for survival of planted shrubs. The shrub survival rate at four years after planting is an indicator of successful enhancement of habitat quality to Category 2. Accordingly, although a minimum 5-acre area of shrub planting is anticipated, the certificate holder may choose to plant a larger area. The certificate holder shall complete the initial sagebrush planting within one year after the beginning of construction of the facility. Supplementing existing but disturbed sagebrush areas with sagebrush seedlings would assist the recovery of this valuable shrub-steppe component. The certificate holder shall obtain shrubs from a qualified nursery or grow shrubs from native seeds gathered from the mitigation area. The certificate holder shall identify the area to be planted with sagebrush shrubs after consultation with ODFW and subject to final approval by the Department. The certificate holder shall mark the planted sagebrush clusters at the time of planting for later monitoring purposes and shall keep a record of the number of shrubs planted.
- 10) Tree Planting. If areas of juniper woodland are disturbed during construction, the certificate holder shall plant juniper trees in the mitigation area in locations of deeper soils near canyon bottoms. The certificate holder shall assess specific locations and provide a map of possible planting locations to ODFW and the Department before planting begins. The certificate holder shall determine the number and size of the juniper tree plants based on the professional judgment of a qualified biologist after a ground survey of actual conditions. The size of the tree-planting area will depend on the available mitigation area and opportunity for survival of planted trees. The tree survival rate at four years after planting is an indicator of successful enhancement of habitat quality to Category 2. The certificate holder shall obtain trees from a qualified nursery or suitable transplants from LJIIB construction zones. The certificate holder shall identify

Leaning Juniper IIB Habitat Mitigation Plan
[JUNE 21, 2013]

1 the area to be planted with juniper trees after consultation with ODFW and subject to
2 final approval by the Department. The certificate holder shall mark the planted trees at
3 the time of planting for later monitoring purposes and shall keep a record of the number
4 of trees planted.

5 11) Weed Control. The certificate holder shall implement a weed control program. Under the
6 weed control program, the certificate holder shall monitor the mitigation area to locate
7 weed infestations. The certificate holder shall continue weed control monitoring, as
8 needed, for the life of the facility. As needed, the certificate holder shall use appropriate
9 methods to control weeds. Weed control on the mitigation site will reduce the spread of
10 noxious weeds within the habitat mitigation area and on any nearby grassland, CRP or
11 cultivated agricultural land. Weed control will promote the growth of desirable native
12 vegetation and planted sagebrush. The certificate holder may consider weeds to be
13 successfully controlled when weed clusters have been eradicated or reduced to a non-
14 competing level. Weeds may be controlled with herbicides or hand-pulling. The
15 certificate holder shall notify the landowner of the specific chemicals to be used on the
16 site and when spraying will occur. To protect locations where young desirable forbs may
17 be growing, spot-spraying may be used instead of total area spraying.

18 12) Fire Control. The certificate holder shall implement a fire control plan for wildfire
19 suppression within the mitigation area. The certificate holder shall provide a copy of the
20 fire control plan to the Department before starting habitat enhancement actions. The
21 certificate holder shall include in the plan appropriate fire prevention measures, methods
22 to detect fires that occur and a protocol for fire response and suppression. The certificate
23 holder shall maintain fire control for the life of the facility. If any part of the mitigation
24 area is damaged by wildfire, the certificate holder shall assess the extent of the damage
25 and implement appropriate actions to restore habitat quality in the damaged area.

26 13) Nest platforms. The certificate holder shall construct at least one artificial raptor nest
27 platform in the mitigation area tailored to the opportunities of the site, using best
28 professional judgment of raptor use in the general area. The certificate holder may
29 construct more than one nest platform based on the availability of suitable locations. The
30 certificate holder shall maintain the nest platforms for the life of the facility.

31 14) Habitat Protection. The certificate holder shall restrict uses of the mitigation area that are
32 inconsistent with the goals of no net loss of habitat in Categories 2, 3 and 4 and a net
33 benefit in habitat quantity or quality for impacts to habitat in Categories 2 and 5.

34 **VI. Monitoring**

35 **1. Monitoring Procedures**

36 The certificate holder shall hire a qualified investigator (an independent botanist, wildlife
37 biologist or revegetation specialist) to conduct a comprehensive monitoring program for the
38 mitigation area. The purpose of this monitoring is to evaluate on an ongoing basis the protection
39 of habitat quality, the results of enhancement actions and the use of the area by avian and
40 mammal species, especially during the wildlife breeding season.

41 The investigator shall monitor the habitat mitigation area for the life of the facility
42 beginning in the year following the initial sagebrush planting. The investigator shall visit the site
43 as necessary to carry out the following monitoring procedures:

Leaning Juniper IIB Habitat Mitigation Plan
[JUNE 21, 2013]

- 1 10) Annually assess vegetation cover (species, structural stage, etc.) and progress toward
2 meeting the success criteria.
- 3 11) Annually record environmental factors (such as precipitation at the time of surveys
4 and precipitation levels for the year).
- 5 12) Annually record any wildfire that occurs within the mitigation area and any remedial
6 actions taken to restore habitat quality in the damaged area.
- 7 13) Annually assess the success of the weed control program and recommend remedial
8 action, if needed.
- 9 14) Assess the recovery of native bunchgrass and natural recruitment of sagebrush
10 resulting from removal of livestock grazing pressure by comparing the quality of
11 bunchgrass and sagebrush cover at the time of each monitoring visit with the quality
12 observed in previous monitoring visits and as observed when the mitigation area was
13 first established. The investigator shall establish photo plots of naturally recovering
14 sagebrush and native bunchgrass during the first year following the beginning of
15 construction of the facility. The investigator shall take comparison photos in the first
16 year and in every other year thereafter until the subject vegetation has achieved
17 mature stature. The investigator shall determine the extent of successful recovery of
18 native bunchgrass based on measurable indicators (such as, signs of more abundant
19 seed production) and shall report on the progress of recovery within in the monitoring
20 plots. The investigator shall report on the timing and extent of any livestock grazing
21 that has occurred within the mitigation area since the previous monitoring visit.
- 22 15) Assess the survival rate and growth of planted sagebrush. At the time of planting,
23 sagebrush clusters will be marked for the purpose of monitoring. The investigator
24 shall select several planted clusters for photo monitoring and shall take close-up and
25 long-distance digital images of each selected cluster during each monitoring visit. The
26 certificate holder shall determine the number of clusters to be photo-monitored at the
27 time of planting, in consultation with the Department and ODFW, based on the
28 number of clusters planted. The investigator shall take comparison photos in the first
29 year following the initial sagebrush planting and in every other year thereafter until
30 the surviving planted sagebrush has achieved mature stature. In each monitoring year,
31 the investigator shall determine and report the survival rate of planted sagebrush.
32 Based on past experience of restoration specialists for other sagebrush planting
33 projects, a survival rate as high as 50 percent can be achieved if there are years of
34 high soil moisture, but a more typical survival rate is 2 surviving shrubs per 10
35 planted (20 percent) after four years. Shrub-planting will be considered successful if a
36 20-percent survival rate is achieved after four years. The investigator shall
37 recommend remedial action when, in the investigator's judgment, the survival rate of
38 planted sagebrush is inadequate to demonstrate a trend toward an improvement in
39 habitat quality.
- 40 16) Assess the survival rate and growth of planted juniper trees. At the time of planting,
41 juniper trees will be marked for the purpose of monitoring. The investigator shall
42 select several planted trees for photo monitoring and shall take close-up and long-
43 distance digital images of each selected tree during each monitoring visit. The
44 certificate holder shall determine the number of trees to be photo-monitored at the

Leaning Juniper IIB Habitat Mitigation Plan
[JUNE 21, 2013]

1 time of planting, in consultation with the Department and ODFW, based on the
2 number of trees planted. The investigator shall take comparison photos in the first
3 year following planting and in every other year thereafter until the surviving planted
4 trees have achieved mature stature. In each monitoring year, the investigator shall
5 determine and report the survival rate of planted trees and shall note overall vigor,
6 height of tree and the extent of branching. Based on past experience of restoration
7 specialists, one in five planted juniper trees may typically survive. Juniper planting
8 will be considered successful when, in the investigator's judgment, one in five have
9 survived. The investigator shall recommend remedial action when, in the
10 investigator's judgment, the survival rate is inadequate to demonstrate a trend toward
11 an improvement in habitat quality.

12 17) Between April 21 and May 21 beginning in the first spring season after the beginning
13 of construction of the facility, conduct an area search survey of avian species. An
14 "area search" survey consists of recording all birds seen or heard in specific areas (for
15 example, square or circular plots that are 5 to 10 acres in size). Area searches will be
16 conducted during morning hours on days with low or no wind. The investigator shall
17 determine the number searches and the number of search areas in consultation with
18 ODFW. The investigator shall repeat the area search survey every five years during
19 the life of the facility.

20 18) Beginning in the first year after the beginning of construction of the facility and
21 repeating every five years during the life of the facility, the investigator shall record
22 observations of special status plant or wildlife species (federal or state threatened or
23 endangered species and state sensitive species) during appropriate seasons for
24 detection of these species.

25 The certificate holder shall report the investigator's findings and recommendations
26 regarding the monitoring of the mitigation area to the Department and to ODFW on an annual
27 basis. In the annual report, the certificate holder shall describe all habitat mitigation actions
28 carried out during the reporting year. The report to the Department may be included as part of the
29 annual report on the facility.

30 **2. Success Criteria**

31 Mitigation of the permanent and temporal habitat impacts of the facility may be
32 considered successful if the certificate holder protects and enhances sufficient habitat within the
33 mitigation area to meet the ODFW goals of no net loss of habitat in Categories 2, 3 and 4 and a
34 net benefit in habitat quantity or quality for impacts to habitat in Categories 2 and 5. The
35 certificate holder must protect the quantity and quality of habitat within the mitigation area for
36 the life of the facility. ODFW has advised the Department that protection of habitat alone
37 (without enhancement activity) will not meet the intent of the "net benefit" goal.

38 The certificate holder must protect a sufficient quantity of habitat in each category to
39 meet the mitigation area requirements calculated under Section III based on the final design
40 configuration of each phase of the facility. The certificate holder shall determine the actual
41 mitigation area requirements for each phase, subject to Department approval, before beginning
42 construction of the that phase. If the land selected for the mitigation area does not already
43 contain sufficient habitat in each category to meet these requirements, then the certificate holder
44 must demonstrate improvement of habitat quality sufficient to change lower-value habitat to a

Leaning Juniper IIB Habitat Mitigation Plan

[JUNE 21, 2013]

1 higher value (for example, to convert Category 3 habitat to Category 2). The certificate holder
2 may demonstrate improvement of habitat quality based on evidence of indicators such as
3 increased avian use by a diversity of species, survival of planted shrubs and juniper trees, more
4 abundant seed production of desirable native bunchgrass, natural recruitment of sagebrush and
5 successful weed control. If the certificate holder cannot demonstrate that the habitat mitigation
6 area is trending toward the habitat quality goals described above within four years after the initial
7 sagebrush planting, the certificate holder shall propose remedial action. The Department may
8 require supplemental planting or other corrective measures.

9 After the certificate holder has demonstrated that the habitat quantity goals have been
10 achieved, the investigator shall verify, during subsequent monitoring visits, that the mitigation
11 area continues to meet the ODFW “no net loss” and “net benefit” goals described above. The
12 investigator shall recommend remedial action if the habitat quality within the mitigation area
13 falls below the habitat quantity goals listed above. The Department may require supplemental
14 planting, other corrective measures and additional monitoring as necessary to ensure that the
15 habitat quantity goals are achieved and maintained.

16 **1. AMENDMENT OF THE PLAN**

17 This Habitat Mitigation Plan may be amended from time to time by agreement of the
18 certificate holder and the Oregon Energy Facility Siting Council (“Council”). Such amendments
19 may be made without amendment of the site certificate. The Council authorizes the Department
20 to agree to amendments to this plan. The Department shall notify the Council of all amendments,
21 and the Council retains the authority to approve, reject or modify any amendment of this plan
22 agreed to by the Department.

23

Attachment F

Leaning Juniper IIA Wind Project: Revegetation Plan
[JUNE 21, 2013]

1 **I. Introduction**

2 This plan describes methods and standards for restoration of areas disturbed during the
3 construction of the Leaning Juniper IIA Wind Power Facility , excluding areas occupied by
4 permanent facility components (the “footprint”).¹¹⁶ The objective of revegetation is to restore the
5 disturbed areas to pre-disturbance condition or better. The site certificate for the facility requires
6 restoration of these areas. This plan has been developed in consultation with the Oregon
7 Department of Fish and Wildlife (ODFW).

8 Per Amendment 2 to the Leaning Juniper II Wind Power Facility, the facility was divided
9 into two separate facilities with LJIIA and LJIIB each receiving its own site certificates.
10 However, the site certificate holders agreed to share mitigation and environmental
11 responsibilities. Therefore, the requirements for the facility as a whole, including both LJIIA and
12 LJIIB, remain in this Revegetation Plan and each individual site certificate holder remains bound
13 by its terms.

14 The site certificate describes the area of disturbance anticipated during construction of the
15 Leaning Juniper IIA facility. The affected area includes cultivated or otherwise developed
16 agricultural land (cropland) as well as areas of grassland, shrub-steppe habitat and other habitat
17 subtypes (wildlife habitat areas). The intensity of the construction impact will vary. In some
18 areas, the impact will be relatively light, but in other areas, heavy construction activity will
19 remove all vegetation, remove topsoil and compact the remaining subsoil. Where vegetation has
20 been damaged or removed during construction, the certificate holder must restore suitable
21 vegetation. In addition, the certificate holder shall maintain erosion and sediment control
22 measures put in place during construction until the affected areas are restored as described in this
23 plan and the risk of erosion has been eliminated. The plan specifies monitoring procedures to
24 evaluate revegetation success of disturbed wildlife habitat areas. Remedial action may be
25 necessary for wildlife habitat areas that do not show revegetation progress. Additional mitigation
26 may be necessary if revegetation is unsuccessful.

27 **II. Description of the Facility Site**

28 The facility is located in Gilliam County, Oregon. The facility site is on private
29 agricultural land used primarily for livestock grazing and some dry land winter wheat
30 production. Soils are typically loess formations of well-drained, moderately permeable, fertile
31 silt loams over basalt. The area receives approximately 9 inches of precipitation annually, most
32 of which occurs between October 1 and March 31.

33 The site is within the Columbia Plateau physiographic province. The facility is located on
34 an upland plateau at elevations ranging up to 980 feet, with relief of about 130 feet. Most of the
35 native vegetation within the site boundary has been modified by livestock grazing and past
36 wildfires. Functional mature shrub-steppe and juniper woodland habitat is patchy, occurring in
37 specific locations. Bitterbrush shrub cover is located in the north area west of Highway 19 and

¹¹⁶ This plan is incorporated by reference in the site certificate for the Leaning Juniper IIB Wind Power Facility and must be understood in that context. It is not a “stand-alone” document. This plan does not contain all mitigation required of the certificate holder.

Leaning Juniper IIA Revegetation Plan

[JUNE 21, 2013]

1 shrub-grass sagebrush in residual patches throughout with larger patches just west of Highway
2 19 and in lower elevation, deeper soil areas of the LJIB area.¹¹⁷ Mature juniper tree woodlands
3 with grassland or shrub-grass/sagebrush understories are mostly within a swath just west of
4 Highway 19 and at lower elevations of the eastern portions east of Highway 19 in the LJIB area.
5 Individual junipers are sparsely scattered in other habitats. Category 2 and 3 open low shrub
6 habitat is the most abundant native habitat. It consists of low-stature snakeweed and rabbitbrush-
7 dominated shrub lands with patches of sagebrush and native bunchgrass, each with varying
8 degrees of non-native invasive grass and forb species. Perennial grassland is in patches where
9 grazing and other activities have had less intensive land use impacts.

10 III. Revegetation Methods

11 The certificate holder shall begin restoration of disturbed areas as soon as possible after
12 completion of facility construction activity in the area to be restored. The certificate holder shall
13 restore areas of disturbance by preparing the soil and seeding using common application
14 methods. The certificate holder shall use mulching and other appropriate practices to control
15 erosion and sediment during facility construction and during revegetation work. The certificate
16 holder shall restore topsoil to pre-construction condition. The certificate holder shall select the
17 seed mix to apply based on the pre-construction land use, as described below. For affected
18 juniper woodland areas, planting young juniper trees may be preferred over seeds. The certificate
19 holder shall consult with ODFW as described in Section V below regarding appropriate seeding
20 or planting according to site-specific restoration needs.

21 1. Seed Planting Methods

22 Planting should be done at the appropriate time of year to facilitate seed germination,
23 based on weather conditions and the time of year when construction-related ground disturbance
24 occurs. The certificate holder shall choose planting methods based on site-specific factors such
25 as slope, erosion potential and the size of the area in need of revegetation. Disturbed ground may
26 require chemical or mechanical weed control before weeds have a chance to go to seed. Two
27 common application methods are described as follows.

28 (a) Broadcasting

29 Broadcast the seed mix at the specified application rate. Where feasible, apply half of the
30 total mix in one direction and the second half of mix in the direction perpendicular to first half.
31 Apply weed-free straw from a certified field or sterile straw at a rate of two tons per acre
32 immediately after applying seed. Crimp straw into the ground to a depth of two inches using a
33 crimping disc or similar device. As an alternative to crimping, a tackifier may be applied using
34 hydroseed equipment at a rate of 100 pounds per acre. Prior to mixing the tackifier, visually
35 inspect the tank for cleanliness. If remnants from previous hydroseed applications exist, wash
36 tank to remove remnants. Include a tracking dye with the tackifier to aid uniform application.
37 Broadcasting should not be used if winds exceed five miles per hour.

38 (b) Drilling

39 Using an agricultural or range seed drill, drill seed at 70 percent of the recommended
40 application rate to a depth of ¼ inch or as recommended by the seed supplier. Where feasible,
41 apply half of the total mix in one direction and the second half of mix in the direction

¹¹⁷ The LJIA and LJIB areas are described in the *Final Order on Amendment #1*.

Leaning Juniper IIA Revegetation Plan
[JUNE 21, 2013]

1 perpendicular to first half. If mulch has been previously applied, seed may be drilled through the
2 mulch provided the drill is capable of penetrating the straw resulting in seed-to-soil contact
3 conducive for germination.

4 **IV. Restoration of Cropland**

5 The certificate holder shall seed disturbed cropland areas with wheat or other crop seed.
6 The certificate holder shall consult with the landowner and farm operator to determine species
7 composition, seed and fertilizer application rates and application methods.

8 Cropland areas are successfully revegetated when the replanted areas achieve crop
9 production comparable to adjacent non-disturbed cultivated areas. The certificate holder shall
10 consult with the landowner or farmer to determine whether these areas have been successfully
11 revegetated and shall report to the Department on the success of revegetation in these areas.

12 **V. Restoration of Wildlife Habitat Areas**

13 The certificate holder shall seed all disturbed grassland, shrub-steppe, juniper woodland
14 and other wildlife habitat subtype areas that are not cropland. The certificate holder shall consult
15 with ODFW and the landowner to determine the appropriate seed mix and application rate for
16 these areas, including a combination of grasses, forbs, shrubs and juniper trees based on the
17 characteristics of the affected area. The mix should contain native species selected based on
18 relative availability and compatibility with local growing conditions. Seed mix selection should
19 consider soil erosion potential, soil type, seed availability and the need for using native or native-
20 like species. The certificate holder shall obtain approval of the composition of the seed mix from
21 the Oregon Department of Energy (Department). The certificate holder shall use seed provided
22 by a reputable supplier and complying with the Oregon Seed Law. The certificate holder shall
23 determine the number and size of the juniper tree plants based on the professional judgment of a
24 qualified biologist after a ground survey of actual conditions. The certificate holder shall obtain
25 trees from a qualified nursery or suitable transplants from LJIIB construction zones.

26 **VI. Monitoring**

27 **1. Revegetation Record**

28 The certificate holder shall maintain a record of revegetation work for both cropland and
29 wildlife habitat areas. In the record, the certificate holder shall include the date that construction
30 activity was completed in the area to be restored, a description of the affected area (location,
31 acres affected and pre-disturbance condition), the date that revegetation work began and a
32 description of the work done within the affected area. The certificate shall update the
33 revegetation records from time to time, as revegetation work occurs. The certificate holder shall
34 provide copies of these records to the Department at the time of submitting the annual report
35 required under the site certificate.

36 **2. Monitoring Procedures**

37 The certificate holder shall monitor the revegetation of wildlife habitat areas as described
38 in this section, unless the landowner has converted the area to a use inconsistent with the success
39 criteria. The certificate holder shall employ a qualified investigator (an independent botanist or
40 revegetation specialist) to examine all non-cropland revegetation areas to assess vegetation cover
41 (species, structural stage, etc.) and progress toward meeting the success criteria described below.

Leaning Juniper IIA Revegetation Plan
[JUNE 21, 2013]

A. Weed Control

1 A qualified investigator shall inspect each revegetation area on an annual basis during the
2 first five years following initial seeding to assess weed growth and to recommend weed
3 control measures. The investigator shall report to the certificate holder, the Department
4 and ODFW following each inspection, describing weed growth and the success of control
5 measures. Based on the Year 5 report (described below), the certificate holder shall
6 confer with the Department and ODFW to develop a weed control plan for subsequent
7 years.

B. Wildlife Habitat Recovery

8 After the first growing season following initial seeding (Year 1), a qualified investigator
9 shall inspect each revegetation area to assess revegetation success based on the success criteria
10 and to recommend remedial actions, if needed. The qualified investigator shall reinspect these
11 areas at two years and at four years after the first inspection (Year 3 and Year 5). The
12 investigator shall report to the certificate holder, the Department and ODFW following each
13 inspection. The report shall include the investigator's assessment of whether the revegetated
14 areas are trending toward meeting the success criteria and any remedial actions recommended.

15 Based on the Year 5 report, the certificate holder shall confer with the Department and
16 ODFW to develop an action plan for subsequent years. If an area is not trending toward meeting
17 the success criteria at Year 5 and has not been converted by the landowner to an inconsistent use,
18 the certificate holder may propose remedial action and additional monitoring based on an
19 evaluation of site capability. As an alternative, the certificate holder may conclude that
20 revegetation of the area was unsuccessful and propose appropriate mitigation for the loss of
21 habitat quality and quantity. The certificate holder shall implement the action plan, subject to the
22 approval of the Department.

23 The certificate holder's qualified investigator shall evaluate whether a wildlife habitat
24 area is trending toward meeting the success criteria by comparing the revegetation area to a
25 reference area. In consultation with ODFW, the investigator shall choose reference sites near the
26 revegetation area to represent the target conditions for the revegetation effort. The investigator
27 shall select one or more reference sites that closely resemble the pre-disturbance characteristics
28 of the revegetation area as indicated by site conditions, including vegetation density, relative
29 proportion of desirable vegetation and species diversity of desirable vegetation. "Desirable
30 vegetation" means those species included in the seed mix or native or native-like species,
31 excluding noxious weeds. The investigator shall consider land use patterns, soil type, local
32 terrain and noxious weed densities in selecting reference sites. It is likely that different reference
33 sites will be needed to represent different pre-disturbance habitat conditions of the disturbed
34 areas.

35 During the monitoring visits in Year 1, Year 3 and Year 5, the certificate holder's
36 qualified investigator shall compare the revegetation area to the selected reference sites, unless
37 some event (such as wildfire or tilling) has changed the vegetation conditions of a reference site
38 so that it no longer represents the pre-disturbance conditions of the revegetation area. If such
39 events have eliminated all suitable reference sites for a revegetation area, the investigator, in
40 consultation with ODFW, shall select one or more new reference sites.

Leaning Juniper IIA Revegetation Plan
[JUNE 21, 2013]

1 Within each revegetation area, the investigator shall evaluate the progress of wildlife
2 habitat recovery in comparison to the reference sites. The investigator shall evaluate the
3 following site conditions (both within the revegetation area and within the reference sites):

- 4 • Degree of erosion due to disturbance activities (high, moderate or low).
- 5 • Vegetation density.
- 6 • Relative proportion of desirable vegetation as determined by the average number of
7 stems of desirable vegetation per square foot or by a visual scan of the area, noting
8 overall recovery status.
- 9 • Number of surviving juniper trees and overall vigor, height of tree and the extent of
10 branching.
- 11 • Species diversity of desirable vegetation.

12 The certificate holder shall report the investigator's findings and recommendations
13 regarding wildlife habitat recovery and revegetation success on an annual basis to the
14 Department (as part of the annual report on the facility) and to ODFW.

15 **3. Success Criteria**

16 In each monitoring report to the Department, the certificate holder shall provide an
17 assessment of revegetation success for all previously-disturbed wildlife habitat areas. A wildlife
18 habitat area is successfully revegetated when its habitat quality is equal to, or better than, the
19 habitat quality of the reference site as measured by the site conditions listed above. Juniper
20 planting will be considered successful when, in the investigator's judgment, one in five have
21 survived.

22 When the Department finds that the condition of a wildlife habitat area satisfies the
23 criteria for revegetation success, the Department shall conclude that the certificate holder has met
24 its restoration obligations for that area. If the Department finds that the landowner has converted
25 a wildlife habitat area to a use that is inconsistent with these success criteria, the Department
26 shall conclude that the certificate holder has no further obligation to restore the area for wildlife
27 habitat uses.

28 **4. Remedial Action**

29 After each monitoring visit, the certificate holder's qualified investigator shall report to
30 the certificate holder regarding the revegetation progress of each wildlife habitat area. The
31 investigator shall make recommendations to the certificate holder for reseeded or other remedial
32 measures for areas that are not showing progress toward achieving revegetation success. The
33 certificate holder shall take appropriate action to meet the objectives of this revegetation plan.
34 On an annual basis as part of the annual report on the facility, the certificate holder shall report to
35 the Department the investigator's recommendations and the remedial actions taken. The
36 Department may require reseeded or other remedial measures in those areas that do not meet the
37 success criteria.

38 If a wildlife habitat area is damaged by wildfire during the first five years following
39 initial seeding, the certificate holder shall work with the landowner to restore the damaged area.
40 The certificate holder shall continue to report on revegetation progress during the remainder of

Leaning Juniper IIA Revegetation Plan
[JUNE 21, 2013]

1 the five-year period. The certificate holder shall report the damage caused by wildfire and the
2 cause of the fire, if known.

3 **VII. Amendment of the Plan**

4 This Revegetation Plan may be amended from time to time by agreement of the
5 certificate holder and the Oregon Energy Facility Siting Council ("Council"). Such amendments
6 may be made without amendment of the site certificate. The Council authorizes the Department
7 to agree to amendments to this plan. The Department shall notify the Council of all amendments,
8 and the Council retains the authority to approve, reject or modify any amendment of this plan
9 agreed to by the Department.

Leaning Juniper IIB Wind Project: Revegetation Plan

[JUNE 21, 2013]

I. Introduction

This plan describes methods and standards for restoration of areas disturbed during the construction of the Leaning Juniper IIB Wind Power Facility, excluding areas occupied by permanent facility components (the “footprint”).¹¹⁸ The objective of revegetation is to restore the disturbed areas to pre-disturbance condition or better. The site certificate for the facility requires restoration of these areas. This plan has been developed in consultation with the Oregon Department of Fish and Wildlife (ODFW).

Per Amendment 2 to Leaning Juniper II Wind Power Facility, the facility was divided into two separate facilities with LJIIA and LJIIB each receiving its own site certificates. However, the site certificate holders agreed to share mitigation and environmental responsibilities. Therefore, the requirements for the facility as a whole, including both LJIIA and LJIIB, remain in this Revegetation Plan and each individual site certificate holder remains bound by its terms.

The site certificate describes the area of disturbance anticipated during construction of the Leaning Juniper IIB facility. The affected area includes cultivated or otherwise developed agricultural land (cropland) as well as areas of grassland, shrub-steppe habitat and other habitat subtypes (wildlife habitat areas). The intensity of the construction impact will vary. In some areas, the impact will be relatively light, but in other areas, heavy construction activity will remove all vegetation, remove topsoil and compact the remaining subsoil. Where vegetation has been damaged or removed during construction, the certificate holder must restore suitable vegetation. In addition, the certificate holder shall maintain erosion and sediment control measures put in place during construction until the affected areas are restored as described in this plan and the risk of erosion has been eliminated. The plan specifies monitoring procedures to evaluate revegetation success of disturbed wildlife habitat areas. Remedial action may be necessary for wildlife habitat areas that do not show revegetation progress. Additional mitigation may be necessary if revegetation is unsuccessful.

II. Description of the Facility Site

The facility is located in Gilliam County, Oregon. The facility site is on private agricultural land used primarily for livestock grazing and some dry land winter wheat production. Soils are typically loess formations of well-drained, moderately permeable, fertile silt loams over basalt. The area receives approximately 9 inches of precipitation annually, most of which occurs between October 1 and March 31.

The site is within the Columbia Plateau physiographic province. The facility is located on an upland plateau at elevations ranging up to 980 feet, with relief of about 130 feet. Most of the native vegetation within the site boundary has been modified by livestock grazing and past wildfires. Functional mature shrub-steppe and juniper woodland habitat is patchy, occurring in specific locations. Bitterbrush shrub cover is located in the north area west of Highway 19 and

¹¹⁸ This plan is incorporated by reference in the site certificate for the Leaning Juniper IIB Wind Power Facility and must be understood in that context. It is not a “stand-alone” document. This plan does not contain all mitigation required of the certificate holder.

1 shrub-grass sagebrush in residual patches throughout with larger patches just west of Highway
2 19 and in lower elevation, deeper soil areas of the LJIB area.¹¹⁹ Mature juniper tree woodlands
3 with grassland or shrub-grass/sagebrush understories are mostly within a swath just west of
4 Highway 19 and at lower elevations of the eastern portions east of Highway 19 in the LJIB area.
5 Individual junipers are sparsely scattered in other habitats. Category 2 and 3 open low shrub
6 habitat is the most abundant native habitat. It consists of low-stature snakeweed and rabbitbrush-
7 dominated shrub lands with patches of sagebrush and native bunchgrass, each with varying
8 degrees of non-native invasive grass and forb species. Perennial grassland is in patches where
9 grazing and other activities have had less intensive land use impacts.

10 III. Revegetation Methods

11 The certificate holder shall begin restoration of disturbed areas as soon as possible after
12 completion of facility construction activity in the area to be restored. The certificate holder shall
13 restore areas of disturbance by preparing the soil and seeding using common application
14 methods. The certificate holder shall use mulching and other appropriate practices to control
15 erosion and sediment during facility construction and during revegetation work. The certificate
16 holder shall restore topsoil to pre-construction condition. The certificate holder shall select the
17 seed mix to apply based on the pre-construction land use, as described below. For affected
18 juniper woodland areas, planting young juniper trees may be preferred over seeds. The certificate
19 holder shall consult with ODFW as described in Section V below regarding appropriate seeding
20 or planting according to site-specific restoration needs.

1. Seed Planting Methods

21 Planting should be done at the appropriate time of year to facilitate seed germination,
22 based on weather conditions and the time of year when construction-related ground disturbance
23 occurs. The certificate holder shall choose planting methods based on site-specific factors such
24 as slope, erosion potential and the size of the area in need of revegetation. Disturbed ground may
25 require chemical or mechanical weed control before weeds have a chance to go to seed. Two
26 common application methods are described as follows.

2. Broadcasting

27 Broadcast the seed mix at the specified application rate. Where feasible, apply half of the
28 total mix in one direction and the second half of mix in the direction perpendicular to first half.
29 Apply weed-free straw from a certified field or sterile straw at a rate of two tons per acre
30 immediately after applying seed. Crimp straw into the ground to a depth of two inches using a
31 crimping disc or similar device. As an alternative to crimping, a tackifier may be applied using
32 hydroseed equipment at a rate of 100 pounds per acre. Prior to mixing the tackifier, visually
33 inspect the tank for cleanliness. If remnants from previous hydroseed applications exist, wash
34 tank to remove remnants. Include a tracking dye with the tackifier to aid uniform application.
35 Broadcasting should not be used if winds exceed five miles per hour.

36 (b) Drilling

37 Using an agricultural or range seed drill, drill seed at 70 percent of the recommended
38 application rate to a depth of ¼ inch or as recommended by the seed supplier. Where feasible,
39 apply half of the total mix in one direction and the second half of mix in the direction

¹¹⁹ The LJIA and LJIB areas are described in the *Final Order on Amendment #1*.

1 perpendicular to first half. If mulch has been previously applied, seed may be drilled through the
2 mulch provided the drill is capable of penetrating the straw resulting in seed-to-soil contact
3 conducive for germination.

4 **IV. Restoration of Cropland**

5 The certificate holder shall seed disturbed cropland areas with wheat or other crop seed.
6 The certificate holder shall consult with the landowner and farm operator to determine species
7 composition, seed and fertilizer application rates and application methods.

8 Cropland areas are successfully revegetated when the replanted areas achieve crop
9 production comparable to adjacent non-disturbed cultivated areas. The certificate holder shall
10 consult with the landowner or farmer to determine whether these areas have been successfully
11 revegetated and shall report to the Department on the success of revegetation in these areas.

12 **V. Restoration of Wildlife Habitat Areas**

13 The certificate holder shall seed all disturbed grassland, shrub-steppe, juniper woodland
14 and other wildlife habitat subtype areas that are not cropland. The certificate holder shall consult
15 with ODFW and the landowner to determine the appropriate seed mix and application rate for
16 these areas, including a combination of grasses, forbs, shrubs and juniper trees based on the
17 characteristics of the affected area. The mix should contain native species selected based on
18 relative availability and compatibility with local growing conditions. Seed mix selection should
19 consider soil erosion potential, soil type, seed availability and the need for using native or native-
20 like species. The certificate holder shall obtain approval of the composition of the seed mix from
21 the Oregon Department of Energy (Department). The certificate holder shall use seed provided
22 by a reputable supplier and complying with the Oregon Seed Law. The certificate holder shall
23 determine the number and size of the juniper tree plants based on the professional judgment of a
24 qualified biologist after a ground survey of actual conditions. The certificate holder shall obtain
25 trees from a qualified nursery or suitable transplants from LJIB construction zones.

26 **VI. Monitoring**

27 **3. Revegetation Record**

28 The certificate holder shall maintain a record of revegetation work for both cropland and
29 wildlife habitat areas. In the record, the certificate holder shall include the date that construction
30 activity was completed in the area to be restored, a description of the affected area (location,
31 acres affected and pre-disturbance condition), the date that revegetation work began and a
32 description of the work done within the affected area. The certificate shall update the
33 revegetation records from time to time, as revegetation work occurs. The certificate holder shall
34 provide copies of these records to the Department at the time of submitting the annual report
35 required under the site certificate.

2. Monitoring Procedures

36 The certificate holder shall monitor the revegetation of wildlife habitat areas as described
37 in this section, unless the landowner has converted the area to a use inconsistent with the success
38 criteria. The certificate holder shall employ a qualified investigator (an independent botanist or
39 revegetation specialist) to examine all non-cropland revegetation areas to assess vegetation cover
40 (species, structural stage, etc.) and progress toward meeting the success criteria described below.

Weed Control

1 A qualified investigator shall inspect each revegetation area on an annual basis during
2 the first five years following initial seeding to assess weed growth and to recommend weed
3 control measures. The investigator shall report to the certificate holder, the Department and
4 ODFW following each inspection, describing weed growth and the success of control measures.
5 Based on the Year 5 report (described below), the certificate holder shall confer with the
6 Department and ODFW to develop a weed control plan for subsequent years.

Wildlife Habitat Recovery

7 After the first growing season following initial seeding (Year 1), a qualified investigator
8 shall inspect each revegetation area to assess revegetation success based on the success criteria
9 and to recommend remedial actions, if needed. The qualified investigator shall reinspect these
10 areas at two years and at four years after the first inspection (Year 3 and Year 5). The
11 investigator shall report to the certificate holder, the Department and ODFW following each
12 inspection. The report shall include the investigator's assessment of whether the revegetated
13 areas are trending toward meeting the success criteria and any remedial actions recommended.

14 Based on the Year 5 report, the certificate holder shall confer with the Department and
15 ODFW to develop an action plan for subsequent years. If an area is not trending toward meeting
16 the success criteria at Year 5 and has not been converted by the landowner to an inconsistent use,
17 the certificate holder may propose remedial action and additional monitoring based on an
18 evaluation of site capability. As an alternative, the certificate holder may conclude that
19 revegetation of the area was unsuccessful and propose appropriate mitigation for the loss of
20 habitat quality and quantity. The certificate holder shall implement the action plan, subject to the
21 approval of the Department.

22 The certificate holder's qualified investigator shall evaluate whether a wildlife habitat
23 area is trending toward meeting the success criteria by comparing the revegetation area to a
24 reference area. In consultation with ODFW, the investigator shall choose reference sites near the
25 revegetation area to represent the target conditions for the revegetation effort. The investigator
26 shall select one or more reference sites that closely resemble the pre-disturbance characteristics
27 of the revegetation area as indicated by site conditions, including vegetation density, relative
28 proportion of desirable vegetation and species diversity of desirable vegetation. "Desirable
29 vegetation" means those species included in the seed mix or native or native-like species,
30 excluding noxious weeds. The investigator shall consider land use patterns, soil type, local
31 terrain and noxious weed densities in selecting reference sites. It is likely that different reference
32 sites will be needed to represent different pre-disturbance habitat conditions of the disturbed
33 areas.

34 During the monitoring visits in Year 1, Year 3 and Year 5, the certificate holder's
35 qualified investigator shall compare the revegetation area to the selected reference sites, unless
36 some event (such as wildfire or tilling) has changed the vegetation conditions of a reference site
37 so that it no longer represents the pre-disturbance conditions of the revegetation area. If such
38 events have eliminated all suitable reference sites for a revegetation area, the investigator, in
39 consultation with ODFW, shall select one or more new reference sites.

40 Within each revegetation area, the investigator shall evaluate the progress of wildlife
41 habitat recovery in comparison to the reference sites. The investigator shall evaluate the
42 following site conditions (both within the revegetation area and within the reference sites):

- 1 • Degree of erosion due to disturbance activities (high, moderate or low).
- 2 • Vegetation density.
- 3 • Relative proportion of desirable vegetation as determined by the average number of
- 4 stems of desirable vegetation per square foot or by a visual scan of the area, noting
- 5 overall recovery status.
- 6 • Number of surviving juniper trees and overall vigor, height of tree and the extent of
- 7 branching.
- 8 • Species diversity of desirable vegetation.

9 The certificate holder shall report the investigator's findings and recommendations
10 regarding wildlife habitat recovery and revegetation success on an annual basis to the
11 Department (as part of the annual report on the facility) and to ODFW.

3. Success Criteria

12 In each monitoring report to the Department, the certificate holder shall provide an
13 assessment of revegetation success for all previously-disturbed wildlife habitat areas. A wildlife
14 habitat area is successfully revegetated when its habitat quality is equal to, or better than, the
15 habitat quality of the reference site as measured by the site conditions listed above. Juniper
16 planting will be considered successful when, in the investigator's judgment, one in five have
17 survived.

18 When the Department finds that the condition of a wildlife habitat area satisfies the
19 criteria for revegetation success, the Department shall conclude that the certificate holder has met
20 its restoration obligations for that area. If the Department finds that the landowner has converted
21 a wildlife habitat area to a use that is inconsistent with these success criteria, the Department
22 shall conclude that the certificate holder has no further obligation to restore the area for wildlife
23 habitat uses.

4. Remedial Action

24 After each monitoring visit, the certificate holder's qualified investigator shall report to
25 the certificate holder regarding the revegetation progress of each wildlife habitat area. The
26 investigator shall make recommendations to the certificate holder for reseeding or other remedial
27 measures for areas that are not showing progress toward achieving revegetation success. The
28 certificate holder shall take appropriate action to meet the objectives of this revegetation plan.
29 On an annual basis as part of the annual report on the facility, the certificate holder shall report to
30 the Department the investigator's recommendations and the remedial actions taken. The
31 Department may require reseeding or other remedial measures in those areas that do not meet the
32 success criteria.

33 If a wildlife habitat area is damaged by wildfire during the first five years following
34 initial seeding, the certificate holder shall work with the landowner to restore the damaged area.
35 The certificate holder shall continue to report on revegetation progress during the remainder of
36 the five-year period. The certificate holder shall report the damage caused by wildfire and the
37 cause of the fire, if known.

VIII. Amendment of the Plan

1 This Revegetation Plan may be amended from time to time by agreement of the
2 certificate holder and the Oregon Energy Facility Siting Council (“Council”). Such amendments
3 may be made without amendment of the site certificate. The Council authorizes the Department
4 to agree to amendments to this plan. The Department shall notify the Council of all amendments,
5 and the Council retains the authority to approve, reject or modify any amendment of this plan
6 agreed to by the Department.

7

Attachment G

From: Marion Weatherford

Sent: Thursday, May 09, 2013 11:44 AM

To: Goodwin, Andrea

Subject: Support for Leaning Juniper II and Montague Wind Power Facility Transfers

I am a landowner in the proposed Leaning Juniper II and Montague Wind Power Project areas. I am a member of the budget committee for the Arlington School District. I am a property and income taxpayer in the County of Gilliam and State of Oregon.

The livability within this rural area has been immeasurably enhanced by Wind Power Development. It is the highest and best use of the land in a dry and harsh landscape. It has made Arlington School District one of the few self supporting school districts in Oregon. The global implications toward energy self reliance and a cleaner environment are all too obvious.

I urge the Energy Facility Siting Council (EFSC) to grant the Amendment and Transfer requests for the above Projects.

From: Steve Shaffer
Sent: Thursday, May 09, 2013 2:59 PM
To: Goodwin, Andrea
Subject: Montague

I urge the Energy Facility Siting Council (EFSC) to grant Iberdrola Renewables Amendment and Transfer requests of Leaning Juniper IIb and Montague Wind to PGE. Both Iberdrola Renewables and PGE are strong in helping Oregon to be recognized as a leader in clean-energy development.

It is energy projects like this, that can make Oregon's economic development, sound and sustainable.

As the Gilliam County Judge, I again I urge EFSC to grant the Amendment and Transfer requests!!

Respectfully.

Steve Shaffer

Steve Shaffer
Gilliam County Judge

PO Box 427

Condon, OR 97823

(541) 384-6351

steve.shaffer@co.gilliam.or.us



From: Jan Foglesong
Sent: Friday, May 10, 2013 5:10 AM
To: Goodwin, Andrea
Subject: amendment request

Dear Ms. Goodwin,

As a landowner in the proposed Leaning Juniper II and Montaque Wind Power Facilities, I urge the Energy Facility Siting Council (EFSC) to grant the Amendment and transfer requests. Please reference the recent OpEd article by Steve Schaffer about the benefits of wind energy in Gilliam County.

Thank you.

Sincerely, Jan Holzapfel Foglesong