

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

In the Matter of the Request for Amendment #1 of
the Site Certificate for the Leaning Juniper II Wind
Power Facility

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FINAL ORDER ON
AMENDMENT #1

November 20, 2009

LEANING JUNIPER II WIND POWER FACILITY:
FINAL ORDER ON AMENDMENT #1

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LIST OF ABBREVIATIONS

BLM	Bureau of Land Management
BPA	Bonneville Power Administration
Council	Oregon Energy Facility Siting Council
CRP	Conservation Reserve Program
CUP	Conditional Use Permit
Department	Oregon Department of Energy
DEQ	Oregon Department of Environmental Quality
DOGAMI	Oregon Department of Geology and Mineral Industries
DSL	Oregon Department of State Lands
FAA	Federal Aviation Administration
IBR	Iberdrola Renewables, Inc.
LCDC	Land Conservation and Development Commission
LJF	Leaning Juniper II Wind Power Facility
LJIIA	Leaning Juniper IIA (components previously approved in the Site Certificate)
LJIIB	Leaning Juniper IIB (components that are the subject of this amendment request)
LJWP	Leaning Juniper Wind Power II LLC
MW	megawatt or megawatts
NRCS	U.S. Department of Agriculture, Natural Resources Conservation Service
NWC	Northwest Wildlife Consultants, Inc.
O&M	Operations and maintenance
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
ONHT	Oregon National Historic Trail
OPRD	Oregon Parks and Recreation Department
OWMP	Oregon Wildlife Monitoring Plan
OWRD	Oregon Water Resources Department
PPI	Producer Price Index published by the U.S. Bureau of Labor Statistics
Response to RAI	Letter from Jeffrey Durocher, with enclosures, September 15, 2009
Response to Additional RAI	Letter from Jeffrey Durocher, with enclosures, October 2, 2009
SCADA	Supervisory, Control and Data Acquisition (the control system for the energy facility)
SHPO	State Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WGS	Washington ground squirrel
WMMP	Wildlife Monitoring and Mitigation Plan
ZVI	Zone of Visual Influence

**LEANING JUNIPER II WIND POWER FACILITY:
FINAL ORDER ON AMENDMENT #1**

I. INTRODUCTION

1 The Oregon Energy Facility Siting Council (Council) issues this order in accordance
2 with ORS 469.405 and OAR 345-027-0070. This order addresses a request by the certificate
3 holder, Leaning Juniper Wind Power II LLC (LJWP) for amendment of the site certificate for
4 the Leaning Juniper II Wind Power Facility (LJF).

5 The Council issued a site certificate to LJWP for the LJF in September 2007.¹ The site
6 certificate authorized construction and operation of up to 133 wind turbines and related
7 facility components. The facility would have a peak generating capacity of up to 279
8 megawatts. The facility site is entirely on private lands located in Gilliam County south of
9 Arlington, Oregon. The certificate holder has not begun construction of the facility.

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

II. PROCEDURAL HISTORY AND AMENDMENT PROCESS

12 On June 19, 2009, the LJWP submitted a “Request for Amendment No. 1 to the Site
13 Certificate for the Leaning Juniper II Wind Power Facility” (Request for Amendment #1). On
14 June 26, 2009, LJWP sent copies of the amendment request to a list of reviewing agencies
15 provided by the Oregon Department of Energy (Department) with a memorandum from the
16 Department requesting agency comments by July 31, 2009. On June 30, the Department sent
17 notice of the amendment request to all persons on the Council’s mailing list, to the special list
18 established for the facility and to an updated list of property owners supplied by LJWP,
19 requesting public comments. Due to a typographical error that misstated the public comment
20 deadline in the first notice, the Department sent a second notice on July 7, setting a deadline
21 of August 7, 2009, for public comments on the amendment request.

22 By letter dated July 2, 2009, the Department notified LJWP that the Proposed Order
23 would be issued no later than August 31, 2009.

24 In response to the public and agency notices of the amendment request, the
25 Department received written comments from the following reviewing agencies and members
26 of the public:

- 27 • Reviewing Agencies
28 Jan Houck, Oregon Parks & Recreation Department
29 Todd Hesse, Oregon Department of Environmental Quality, Water Quality
- 30 • Public Comments
31 Shelly Mundy
32 Tyson Mundy
33 Shelley Fenton, Bonneville Power Administration

¹ *Site Certificate for the Leaning Juniper II Wind Power Facility* (September 21, 2007).

1 In addition, in teleconferences with the Oregon Department of Fish and Wildlife
2 (ODFW) and the certificate holder on July 15 and 22, the Department heard comments from
3 ODFW concerning the classification of habitat around areas where Washington ground
4 squirrels had been observed during baseline surveys of the area proposed to be added to the
5 LJF by the amendment. As a result of these discussions, the certificate holder agreed to
6 reassess the habitat areas that would be classified as Category 1 habitat according to ODFW
7 guidance and to reconfigure the proposed layout of new facility components in the expansion
8 area to avoid Category 1 habitat. The Department agreed to allow additional time for ODFW
9 to submit written comments after receiving the supplemental information from the certificate
10 holder. On September 25, ODFW submitted comments on the draft revisions to the *Wildlife*
11 *Monitoring and Mitigation Plan* and *Habitat Mitigation Plan*.²

12 The Department submitted requests for additional information (RAI) to the certificate
13 holder.³ On September 15, the certificate holder submitted a consolidated response, including
14 revisions of the habitat mapping and proposed layout as well as the additional information
15 that the Department had requested.⁴ The Department advised the certificate holder that
16 additional time would be needed to prepare the Proposed Order.⁵ On September 18, the
17 Department advised the certificate holder that the Proposed Order would be issued no later
18 than October 19.⁶

19 The Department considered all of the comments in preparing the Proposed Order. Jan
20 Houck stated that Oregon Parks & Recreation had no comments regarding the proposed
21 amendment.⁷ Todd Hesse noted that the Oregon Department of Environmental Quality
22 administers the National Pollutant Discharge Elimination System (NPDES) 1200-C permit for
23 construction activities.⁸ He stated that, based on review of the Erosion and Sediment Control
24 Plan (Request for Amendment #1, Attachment 5), the amendment would meet permit
25 conditions and that the existing 1200-C permit for the LJF could be amended to cover the
26 proposed expansion of the facility.

27 Shelly Mundy urged the Department to deny the amendment request and, instead,
28 require the certificate holder to submit a new site certificate application.⁹ She stated her
29 opinion that “the sheer size of the proposed added area of 7,962 acres and addition of up to 90
30 turbines speaks not of a simple addition, but of a complete new project site, regardless of it
31 being adjacent to an existing site.” She felt that the requirements for “new proposed wind
32 project sites” should not be “sidestepped by the application for a mere amendment.” Tyson
33 Mundy expressed a similar concern, stating his opinion that “these folks want to circumvent
34 the system put in place to site these projects.”

35 Under ORS 469.405, “a site certificate may be amended with the approval of the
36 Energy Facility Siting Council.” The Council has adopted rules for determining when a site
37 certificate amendment is allowed (OAR 345-027-0030 and -0050) and rules setting out the

² Email from Rose Owens, Oregon Department of Fish and Wildlife, September 25, 2009.

³ Email from John White, Oregon Department of Energy, July 22, August 17, 18 and 20, 2009.

⁴ Letter from Jeffrey Durocher, with enclosures, September 15, 2009.

⁵ Email from John White, Oregon Department of Energy, August 14, 2009.

⁶ Email from John White, Oregon Department of Energy, September 18, 2009.

⁷ Email from Jan Houck, Oregon Parks & Recreation Department, July 1, 2009.

⁸ Email from Todd Hesse, Oregon Department of Environmental Quality, Water Quality Section, July 10, 2009.

⁹ Email from Shelly Mundy, July 15, 2009.

1 procedure for amending a site certificate (OAR 345-027-0060 and -0070). The proposed
2 expansion of the LJF by amendment of the site certificate is allowed under the applicable
3 rules. The Council has previously approved site certificate amendments to authorize
4 expansion of the area within a site boundary or to increase the number of wind turbines in a
5 wind facility.¹⁰ Although the proposed amendment of the LJF would enlarge the area within
6 the site boundary, it would not increase the total number of wind turbines authorized under
7 the site certificate or increase the combined peak generating capacity of the facility.

8 Shelley Fenton commented that the Bonneville Power Administration (BPA) requires
9 an application for BPA approval if the proposed collector substation would be located within
10 “the easement right-of-way occupied by BPA’s McNary Jones Canyon #1, Ashe-Marion #2
11 and Slatt-Buckley #1 transmission lines.”¹¹ BPA has sent further information and application
12 materials to the certificate holder. Under Condition 5, the certificate holder must have
13 “construction rights” before beginning construction on any part of the site.

14 The Department analyzed the Request for Amendment #1 for compliance with all
15 applicable Council standards. The Department’s recommended findings and conclusions are
16 discussed herein. The Department recommended that the Council approve the amendment
17 request, subject to revisions of the site certificate discussed below at page 92.

18 After issuing the Proposed Order on October 15, 2009, the Department issued a public
19 notice as required under OAR 345-027-0070(5) and posted the notice on the Department’s
20 Internet website. The notice invited public comments and gave a deadline of November 16,
21 2009, for comments or contested case requests. The Department did not receive any
22 comments or contested case requests by the deadline of November 16.

23 At a public meeting in The Dalles, Oregon, on November 20, 2009, the Council
24 considered the Department’s recommendations and voted to approve the amendment request.

III. DESCRIPTION OF THE PROPOSED AMENDMENT

25 The amendment request describes an expansion of the site boundary of the LJF. The
26 amendment would not increase the total number of wind turbines authorized under the site
27 certificate or increase the combined peak generating capacity of the facility. LJWP requests
28 the expansion “to minimize wake impacts from existing nearby wind projects and optimize
29 the use of the wind resource.”¹² The amendment would add approximately 7,962 acres to the
30 site and would authorize the construction and operation of up to 84 wind turbines and related
31 infrastructure within the new area.¹³ The new area lies generally southeast of the current LJF
32 site. LJWP refers to the facility components in the new area as “Leaning Juniper IIB” (LJIIB)
33 and the facility components in the previously-approved area as “Leaning Juniper IIA”
34 (LJIIA). The LJIIB wind turbines would have a maximum combined peak generating capacity
35 of up to 186 megawatts.¹⁴

¹⁰ See, for example, *Final Order on Amendment #4 for the Stateline Wind Project* (March 27, 2009) and *Final Order on Amendment #3 for the Klondike III Wind Project* (November 16, 2007).

¹¹ Fax from Shelley Fenton, Bonneville Power Administration, August 6, 2009.

¹² Request for Amendment #1, Section 1, p. 1.

¹³ The certificate holder reduced the maximum number of turbines from 90 to 84 (Response to RAI, Summary of Modifications, p. 1).

¹⁴ The certificate holder proposes to build up to 84 1.5-MW turbines (126 MW), 84 2.1-MW turbines (176.4 MW) or 62 3.0-MW turbines (186 MW) in the LJIIB area (Response to Additional RAI (table) #14, p. 19).

1 LJWP requests the option to build a new substation in the LJIIB area and a 230-kV
2 aboveground transmission line from the new substation to the LJIIA substation near the
3 Bonneville Power Administration’s (BPA) Jones Canyon Switching Station. Alternatively,
4 power generated from the LJIIB turbines would be transmitted to the LJIIA substation on two
5 parallel, double-circuit 34.5-kV aboveground transmission lines.

6 In addition, LJWP requests an extension of the deadline for completing construction of
7 the LJF. Under the current site certificate, the deadline for completing construction is
8 September 24, 2011 (four years from the effective date of the site certificate). If approved, the
9 amendment would extend the construction completion date to September 24, 2013. LJWP
10 anticipates beginning construction of the LJIIA components in late 2009. LJWP requests the
11 extension “to allow sufficient time to complete construction in the LJIIB area, taking into
12 account the time needed to complete the SC amendment process and prepare the modified
13 design for LJIIB.”¹⁵ Although the certificate holder plans to start construction of the LJIIB
14 components immediately following construction of LJIIA, the certificate holder requests the
15 flexibility to build LJIIB in one or more phases, “given that construction could conceivably be
16 delayed by weather or other unforeseen circumstances such as market changes.”

1. Amendment Procedure

17 Under OAR 345-027-0030, a site certificate amendment is needed to extend the
18 deadline for completion of construction. Under the rule, the Council may grant an extension
19 of no more than two years from the current deadline. The rule requires the certificate holder to
20 submit the request “no later than six months before the date of the applicable deadline, or, if
21 the certificate holder demonstrates good cause for the delay in submitting the request, no later
22 than the applicable deadline.” Under the current site certificate, the deadline to complete
23 construction of the LJF is “within four years after the effective date of the site certificate,”
24 which would be September 24, 2011 (Condition 26). The certificate holder submitted its
25 request to extend the deadline for completing construction more than six months before the
26 deadline. The Council finds that the request to extend the construction deadline was filed in a
27 timely manner.

28 For the amendment extending the deadline for completing construction, the Council
29 must consider whether the facility complies with all Council standards, whether there has
30 been any change of circumstances that affects a previous Council finding that was required
31 for issuance of the site certificate and whether the Council has previously granted an
32 extension of the deadline. The Council has not previously granted an extension of the
33 deadline.

34 In addition, under OAR 345-027-0050, a site certificate amendment is needed because
35 the certificate holder proposes to design, construct or operate the LJF in a manner different
36 from the description in the current site certificate. In particular, the certificate holder proposes
37 to expand the site boundary, which could result in significant adverse impacts that the Council
38 has not previously addressed. The proposed amendment requires new conditions and
39 modifications of current conditions in the site certificate. The Department and the Council
40 must follow the procedures of OAR 345-027-0070 in reviewing the amendment request.

¹⁵ Request for Amendment #1, Section 2, p. 1.

1 In making a decision on this amendment request, the Council applies the applicable
2 substantive criteria, as described in OAR 345-022-0030, in effect on the date the certificate
3 holder submitted the request for amendment. The Council applies all other State statutes,
4 administrative rules and local government ordinances in effect on the date the Council makes
5 its decision. For an amendment that would change the site boundary, the Council must
6 consider whether the facility complies with all Council standards with respect to the area
7 added to the site by the amendment. For any amendment, the Council must consider whether
8 the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate. We
9 address compliance with these requirements in Sections IV and V.

2. Amendments to the Site Certificate as Proposed by the Certificate Holder

10 As an attachment to the Request for Amendment #1, LJWP proposed specific changes,
11 additions and deletions to the *Site Certificate for the Leaning Juniper II Wind Power Facility*
12 (September 21, 2007).¹⁶ The attachment is incorporated herein by this reference. The
13 Department recommended that the Council approve the substance of the site certificate
14 amendments proposed by LJWP with other modifications consistent with the amendment
15 request. The Department's recommended revisions are discussed herein beginning at page 92.

16 In addition to the necessary amendments of the Site Certificate, the amendment
17 request would require amendments of the *Wildlife Monitoring and Mitigation Plan*, the
18 *Revegetation Plan* and the *Habitat Mitigation Plan*.¹⁷ The *Wildlife Monitoring and Mitigation*
19 *Plan* is incorporated in Condition 87 of the Site Certificate. The Department's recommended
20 modifications of the *Wildlife Monitoring and Mitigation Plan* are addressed in Revision 27
21 and in Attachment A. The *Revegetation Plan* is incorporated in Condition 74 of the Site
22 Certificate, and the Department's recommended modifications are addressed in Revision 20
23 and in Attachment B. The *Habitat Mitigation Plan* is incorporated in Condition 89 of the Site
24 Certificate, and the Department's recommended modifications are addressed in Revision 29
25 and in Attachment C.

3. Description of the Facility Authorized by Amendment #1

26 The *Final Order on the Application* describes the approved LJF facility.¹⁸ If the
27 Council approves Amendment #1, the certificate holder would be authorized to construct and
28 operate up to 84 wind turbines with a combined peak generating capacity of up to 186 MW
29 together with related or supporting facilities within a new micro-siting area of approximately
30 7,962 acres (LJIIB).¹⁹ The Council previously approved a micro-siting area of approximately
31 6,404 acres (LJIIA).²⁰ The amendment would enlarge the site boundary of the LJF but would
32 not authorize the construction of more turbines or a greater peak generating capacity for the
33 facility as a whole than previously authorized. Facility components as modified by the
34 proposed amendment are described below.

¹⁶ Request for Amendment #1, Attachment 2.

¹⁷ *Final Order on the Application* (September 21, 2007), Attachments A, B and C.

¹⁸ *Final Order on the Application* (September 21, 2007), pp. 10-13.

¹⁹ 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."

²⁰ Response to Additional RAI, Attachment 2, "Table 3--Revised October 2, 2009: Habitat Types and Categories in the Existing Site Boundary for Leaning Juniper IIA with Area of Impact."

1 **Turbines**

2 The LJF consists of up to 127 wind turbines, each having a peak generating capacity
3 up to 3.0 MW.²¹ The combined peak generating capacity of the facility would not exceed
4 276.3 MW.²²

5 The certificate holder plans to construct 43 2.1-MW turbines (90.3 MW) in the
6 previously-approved LJIIA area. Not more than 84 wind turbines would be constructed within
7 the LJIIB micro-siting area.²³ The Council modifies Condition 27 as described in Revision 8.
8 The modification would revise the condition by reducing the maximum number of turbines at
9 the facility from 133 to 127, based on what the certificate holder now proposes to build, and
10 would reduce the maximum generating capacity of the facility from 279 MW to 277 MW.
11 The authorized turbines are otherwise as described in the *Final Order on the Application*.

12 **Power Collection System**

13 A power collection system operating at 34.5 kV would carry the power from each
14 turbine to a project substation. To the extent practicable, the collection system would be
15 installed underground at a depth of at least three feet (Condition 78). Segments of the
16 collector line might be constructed aboveground where necessary to cross streams, wetlands
17 or canyons or because of other geotechnical considerations. The site certificate authorizes up
18 to 33.2 miles of collector lines in the LJIIA area, of which not more than 9.9 miles (30
19 percent) may be aboveground.

20 If approved, Amendment #1 would authorize up to 22.3 additional miles of collector
21 lines in the LJIIB area, of which not more than 6.7 miles (30 percent) may be installed
22 aboveground.²⁴ The collector system is otherwise as described in the *Final Order on the*
23 *Application*.

24 **Substation and Interconnection**

25 The LJIIA substation will be built near the BPA Jones Canyon Switching Station.
26 Based on a Change Request approved by the Department in March 2009, the LJIIA substation
27 would be moved approximately 200 feet to the northeast from where it is shown on Figure C-
28 4 of the Site Certificate Application as submitted on October 4, 2006.²⁵ The location of the
29 proposed substation is shown as “Lot 4” in Figure 4 of the amendment request.²⁶ A short
30 interconnection line from the LJIIA substation carries the power to the BPA switching station
31 and the existing McNary-Santiam 230-kV transmission line.

²¹ Under Condition 27 of the Site Certificate, the certificate holder may make the final turbine selection after a site certificate has been issued but before beginning construction.

²² The certificate holder plans to build 43 2.1-MW turbines (90.3 MW) in the LJIIA area (email from Jeffrey Durocher, September 8, 2009) and up to 62 3.0-MW turbines (186 MW) in the LJIIB area (Response to Additional RAI (table) #14, p. 19).

²³ Response to RAI, Summary of Modifications, p. 1.

²⁴ Request for Amendment #1, Section 4, p. 3, and Response to RAI, Summary of Modifications, p. 1. The total shown here excludes additional aboveground 34.5-kV lines, approximately 6.1 miles in length that may be built under the 34.5-kV interconnection option described below.

²⁵ Under OAR 345-027-0050(5), a certificate holder may ask the Department to determine whether a proposed change requires a site certificate amendment (Change Request). The Department may approve a Change Request based on the criteria in OAR 345-027-0050.

²⁶ Request for Amendment #1, Attachment 1, Figure 4.

1 In this amendment, LJWP requests the option to transmit the power generated by the
2 LJIB turbines to the LJIA substation by either of two methods, described below.

- 3 • The energy from the LJIB turbines would be collected and transferred to the
4 LJIA substation by a 34.5-kV aboveground collector system. This collector
5 system would consist of two double-circuit 34.5-kV lines running parallel to each
6 other.
- 7 • The energy from the LJIB turbines would be collected and routed to a new
8 substation in the LJIB area, where the power would be stepped up to 230 kV. The
9 power would be transmitted to the LJIA substation by a 230-kV aboveground
10 transmission line. The 230-kV line would be carried on monopole or H-frame
11 support structures.²⁷

12 LJWP proposes preferred and alternate routes for the transmission line under either the
13 34.5-kV option or the 230-kV option. The proposed routes and proposed LJIB substation
14 location are shown on Figures 2 and 3 of the amendment request.²⁸ Under either route, the
15 aboveground transmission line would be approximately 6.1 miles long.²⁹ If the LJIB
16 substation is built, it would occupy a permanent area of approximately 3 acres.³⁰

17 **Meteorological Towers**

18 The current site certificate authorizes the construction and operation of four permanent
19 meteorological (met) towers in the LJIA area. Under the proposed amendment, the certificate
20 holder would be authorized to construct and operate two met towers in the LJIB area, but the
21 total number of met towers for the LJF as a whole would be limited to four.³¹ The met towers
22 are otherwise as described in the *Final Order on the Application*.

23 **Operations and Maintenance Facilities**

24 LJWP is planning to construct one operations and maintenance (O&M) building in the
25 LJIA area.³² The building will be no larger than 4,000 square feet and will be built within a
26 2-acre area, which will include a graveled parking and storage area.³³ Although the site
27 certificate authorizes the construction of two O&M buildings, the certificate holder is not
28 currently planning to construct a second O&M building and is not requesting any change to
29 the previously-authorized O&M buildings in this amendment request.

30 **Control System**

31 A fiber optic communications network would link the wind turbines to a central
32 computer at the O&M buildings. A Supervisory, Control and Data Acquisition (SCADA)
33 system would collect operating and performance data from each wind turbine and from the
34 project as a whole and allow remote operation of the wind turbines. The length of SCADA
35 system fiber optic lines is generally the same as the length of the collector system, described
36 above (a total of up to 22.3 miles for LJIB). In addition, the LJIB SCADA system would

²⁷ Request for Amendment #1, Attachment 1, Figures 5-7.

²⁸ Response to RAI, Attachment C, revised Figures 2 and 3.

²⁹ Response to RAI, Summary of Modifications, p. 1.

³⁰ Response to RAI, Attachment 1, revised Table 1.

³¹ Request for Amendment #1, Section 4, p. 6.

³² Response to RAI, Attachment G, Table 1.

³³ Response to RAI, Attachment G, Table 1, and email from Jeffrey Durocher, September 21, 2009.

1 include lightning shield communication wires from the collector substation to the
2 interconnection station along the length of the 230-kV transmission line (an additional 6.1
3 miles). Alternatively, if 34.5-kV lines are used to carry the power from LJIIB to the LJIIA
4 substation, as described above, then lightning shield communication cables will parallel each
5 of the double-circuit 34.5-kV lines (a total of up to 12.2 miles). The SCADA system is
6 otherwise as described in the *Final Order on the Application*.

7 **Access Roads**

8 The current site certificate authorizes approximately 28 miles of new access roads and
9 7 miles of improved existing private roads in the LJIIA area.

10 Up to 20.9 miles of new access roads would be constructed for LJIIB. In addition,
11 approximately 5.4 miles of existing County roads and approximately 0.6 miles of existing
12 private roads would be improved.³⁴ During construction, new access roads and improved
13 private roads would have a temporary width of up to 80 feet (for use as crane paths). During
14 operation, improved private roads would have a finished width of 20 feet. Up to 16.7 miles of
15 new roads would have a finished width of 20 feet and up to 4.2 miles of new roads would
16 have a finished width of 32 feet. New roads and improved private roads are otherwise as
17 described in the *Final Order on the Application*.

18 Three existing County roads will be improved by widening, grading and graveling.
19 County roads are typically 16 feet wide, and will need to be widened to up to 60 feet during
20 construction and up to 30 feet during operations.

21 **Construction Disturbance Areas**

22 The current site certificate authorizes a 2-acre laydown and staging area near each
23 turbine string and several centrally-located 5-acre areas. Additional laydown areas were
24 authorized at each tower site and at locations near collector line construction. The total area
25 temporarily disturbed for laydown and staging during construction was estimated to amount
26 to approximately 527 acres within the LJIIA site boundary.

27 The amendment would authorize a total of eight 2.5-acre staging areas located
28 adjacent to turbine strings and two centrally-located, 10-acre staging areas in the LJIIB area.³⁵
29 Additional laydown area would be needed at each tower site.³⁶ The total area temporarily
30 disturbed for laydown and staging during construction would amount to approximately 345
31 acres within the LJIIB site boundary.

32 **Site and Site Boundary**

33 ORS 469.300 defines a “site” as “any proposed location of an energy facility and
34 related or supporting facilities.” OAR 345-001-0010(53) defines “site boundary” as “the
35 perimeter of the site of a proposed energy facility, its related or supporting facilities, all
36 temporary laydown and staging areas and all corridors and micrositing corridors proposed by
37 the applicant.” The previously-approved LJI site lies southwest of Arlington, in Gilliam
38 County, Oregon. The Arlington city limit boundary is adjacent to the site boundary. The
39 LJIIB area lies to the southeast of the previously-approved site and would add approximately

³⁴ Request for Amendment #1, Section 4, p. 5, and Response to RAI, Summary of Modifications, p. 1, and Attachment 1, Table 1.

³⁵ Request for Amendment #1, Section 4, p. 6, and Response to RAI, Summary of Modifications, p. 1.

³⁶ Response to RAI, Attachment 1, revised Table 2.

1 7,962 acres to the facility site.³⁷ The approved LJIIA area and the proposed LJIIB area are
2 shown on Figure 1 of the Request for Amendment #1, which is incorporated herein by
3 reference.³⁸

4 Revised Figures 2 and 3 illustrate possible configurations of the proposed LJIIB
5 components within the site boundary.³⁹ Approval of Amendment #1 would authorize the
6 certificate holder to construct wind turbines and other facility components within the
7 micrositing area, subject to the conditions of the site certificate. Before beginning
8 construction, the certificate holder must provide to the Department a map showing the final
9 design configuration of the facility.⁴⁰ Within 90 days after beginning operation of the facility,
10 the certificate holder must submit a legal description of the facility site to the Department
11 (Condition 2), as required by OAR 345-027-0020(2).

IV. THE COUNCIL'S SITING STANDARDS: FINDINGS AND CONCLUSIONS

12 The Council must decide whether the amendment complies with the facility siting
13 standards adopted by the Council. In addition, the Council must impose conditions for the
14 protection of the public health and safety, conditions for the time of commencement and
15 completion of construction and conditions to ensure compliance with the standards, statutes
16 and rules addressed in the project order. ORS 469.401(2).

17 The Council is not authorized to determine compliance with regulatory programs that
18 have been delegated to another state agency by the federal government. ORS 469.503(3).
19 Nevertheless, the Council may consider these programs in the context of its own standards to
20 ensure public health and safety, resource efficiency and protection of the environment.

21 The Council has no jurisdiction over design or operational issues that do not relate to
22 siting, such as matters relating to employee health and safety, building code compliance, wage
23 and hour or other labor regulations, or local government fees and charges. ORS 469.401(4).

24 In making its decision on an amendment of a site certificate, the Council applies the
25 applicable state statutes, administrative rules and local government ordinances that are in
26 effect on the date the Council makes its decision, except when applying the Land Use
27 Standard. In making findings on the Land Use Standard, the Council applies the applicable
28 substantive criteria in effect on the date the certificate holder submitted the request for
29 amendment. OAR 345-027-0070(10).

1. General Standard of Review

OAR 345-022-0000

30 *(1) To issue a site certificate for a proposed facility or to amend a site certificate,*
31 *the Council shall determine that the preponderance of evidence on the record*
32 *supports the following conclusions:*
33

³⁷ Request for Amendment #1, Section 3, p. 1.

³⁸ The certificate holder provided a preliminary legal description of the boundaries of the LJIIB area (Request for Amendment #1, Section 4, pp. 6-12).

³⁹ Response to RAI, Attachment C, revised Figures 2 and 3.

⁴⁰ This requirement is contained in the *Habitat Mitigation Plan*, which is incorporated in the site certificate by Condition 89.

1 (a) *The facility complies with the requirements of the Oregon Energy Facility*
2 *Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the*
3 *standards adopted by the Council pursuant to ORS 469.501 or the overall public*
4 *benefits of the facility outweigh the damage to the resources protected by the*
5 *standards the facility does not meet as described in section (2);*

6 (b) *Except as provided in OAR 345-022-0030 for land use compliance and*
7 *except for those statutes and rules for which the decision on compliance has been*
8 *delegated by the federal government to a state agency other than the Council, the*
9 *facility complies with all other Oregon statutes and administrative rules identified*
10 *in the project order, as amended, as applicable to the issuance of a site certificate*
11 *for the proposed facility. If the Council finds that applicable Oregon statutes and*
12 *rules, other than those involving federally delegated programs, would impose*
13 *conflicting requirements, the Council shall resolve the conflict consistent with the*
14 *public interest. In resolving the conflict, the Council cannot waive any applicable*
15 *state statute.*

16 * * *

17 We address the requirements of OAR 345-022-0000 in the findings of fact, reasoning,
18 conditions and conclusions of law discussed in the sections that follow. Upon consideration of
19 all of the evidence in the record, we state our general conclusion regarding the amendment
20 request in Section VII.

2. Standards about the Applicant

(a) Organizational Expertise

OAR 345-022-0010

21 (1) *To issue a site certificate, the Council must find that the applicant has the*
22 *organizational expertise to construct, operate and retire the proposed facility in*
23 *compliance with Council standards and conditions of the site certificate. To*
24 *conclude that the applicant has this expertise, the Council must find that the*
25 *applicant has demonstrated the ability to design, construct and operate the*
26 *proposed facility in compliance with site certificate conditions and in a manner*
27 *that protects public health and safety and has demonstrated the ability to restore*
28 *the site to a useful, non-hazardous condition. The Council may consider the*
29 *applicant's experience, the applicant's access to technical expertise and the*
30 *applicant's past performance in constructing, operating and retiring other*
31 *facilities, including, but not limited to, the number and severity of regulatory*
32 *citations issued to the applicant.*

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

38 (3) *If the applicant does not itself obtain a state or local government permit or*
39 *approval for which the Council would ordinarily determine compliance but*
40 *instead relies on a permit or approval issued to a third party, the Council, to issue*
41 *a site certificate, must find that the third party has, or has a reasonable likelihood*

1 *of obtaining, the necessary permit or approval, and that the applicant has, or has*
2 *a reasonable likelihood of entering into, a contractual or other arrangement with*
3 *the third party for access to the resource or service secured by that permit or*
4 *approval.*

5 *(4) If the applicant relies on a permit or approval issued to a third party and the*
6 *third party does not have the necessary permit or approval at the time the Council*
7 *issues the site certificate, the Council may issue the site certificate subject to the*
8 *condition that the certificate holder shall not commence construction or operation*
9 *as appropriate until the third party has obtained the necessary permit or approval*
10 *and the applicant has a contract or other arrangement for access to the resource*
11 *or service secured by that permit or approval.*

Findings of Fact

A. Organizational Expertise

12 In the *Final Order on the Application*, the Council found that the certificate holder
13 (LJWP) had the organizational expertise necessary to construct and operate the LJF because
14 of its corporate relationship as a subsidiary of PPM Energy, Inc.⁴¹ The Council found that
15 PPM Energy was ultimately owned by Iberdrola SA, a Spanish electric company. Since the
16 date of the *Final Order*, PPM Energy has changed its name to “Iberdrola Renewables, Inc.”
17 (IBR). Although there have been other modifications of the corporate organization above
18 LJWP, the ultimate corporate parent is still Iberdrola Renovables SA.⁴²

19 Although IBR is ultimately owned by Iberdrola Renovables SA, the role of the parent
20 company in the construction and operation of the facility is primarily financial.⁴³ The
21 certificate holder relies on IBR to support its expertise to construct, operate and retire the
22 facility. IBR’s experience in Oregon includes either construction or operational experience
23 with the Leaning Juniper I, Klondike I, II and III, Pebble Springs, Hay Canyon and Star Point
24 wind energy projects. IBR and the former PPM Energy, Inc. have not received any significant
25 regulatory citations in the course of constructing and operating wind energy facilities in the
26 United States.⁴⁴ The certificate holder is bound by Condition 32 of the site certificate to hire
27 qualified contractors with direct experience in wind energy facility construction to design and
28 build the proposed facility.

B. Third-Party Permits

29 LJWP does not rely on any state or local government permit issued to a third party for
30 the construction and operation of the LJIIA or LJIIB components of the LJF.

Conclusions of Law

31 Based on the findings stated above, the Council concludes that the certificate holder
32 would meet the Council’s Organizational Expertise Standard if Amendment #1 were
33 approved.

⁴¹ Final Order on the Application (September 21, 2007), pp. 17-18.

⁴² Request for Amendment #1, Section 4, p. 13.

⁴³ Response to Additional RAI (table) #18, p. 21.

⁴⁴ Since February 2006, IBR has received four letters and minor citations, without any penalties being imposed. Corrective actions were taken (Response to Additional RAI (table) #18, pp. 21-22).

(b) Retirement and Financial Assurance

1 **OAR 345-022-0050**

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

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

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

Findings of Fact

A. LJIIA

9 In the *Final Order on the Application*, the Council found that the LJF site could be
10 restored adequately to a useful, non-hazardous condition following permanent cessation of
11 construction or operation of the facility.⁴⁵ The Council found that the certificate holder had
12 demonstrated a reasonable likelihood of obtaining a bond or letter of credit, satisfactory to the
13 Council, in an amount adequate to restore the site. The Council found that the value of the
14 financial assurance bond or letter of credit for restoring the site would not exceed \$8.847
15 million in 2006 dollars adjusted annually as described in Condition 30.⁴⁶ Condition 30 allows
16 for an adjustment of the financial assurance amount prior to the beginning of construction,
17 based on the final design configuration.

18 While Department review of the amendment request was pending, the certificate
19 holder requested an adjustment of the financial assurance amount based on the final design
20 configuration of the LJIIA components.⁴⁷ Construction of LJIIA was expected to begin in
21 December 2009. The Department requested additional information regarding the final design
22 and prepared a retirement cost estimate based on the following design details provided by the
23 certificate holder:

- 24 • 43 Suzlon 2.1-MW wind turbines will be built in the LJIIA area.⁴⁸
- 25 • The weight of metals in each turbine tower is 206.5 tons and the weight of metals
26 in each turbine nacelle is 82.7 tons.⁴⁹
- 27 • Each turbine tower foundation will have 38 cubic yards of concrete to a depth of
28 three feet below grade.⁵⁰

⁴⁵ *Final Order on the Application* (September 21, 2007), p. 25.

⁴⁶ The site restoration cost estimate was calculated based on unit costs shown in Table 2 (*Final Order on the Application* (September 21, 2008), p. 21).

⁴⁷ Email from Jeffrey Durocher, September 3, 2009.

⁴⁸ Email from Jeffrey Durocher, September 8, 2009.

⁴⁹ Email from Jeffrey Durocher, September 8, 2009. The Department assumed the weights were given in U.S. tons (short tons).

⁵⁰ In the Response to RAI, Attachment G, Table 1, p. 2, the certificate holder provided a calculation of the volume of concrete in the tower foundation from grade to three feet below grade, assuming a pedestal diameter of 18 feet. In response to the Department’s follow-up question, the certificate holder stated that the assumed height of the foundation above grade was one foot (email from Jeffrey Durocher, September 21, 2009). The

- 1 • There will be 13 cubic yards of concrete for each transformer pad adjacent to each
2 turbine tower.⁵¹
- 3 • Two permanent meteorological towers will be built.⁵²
- 4 • One O&M building will be built, and it will be a 4,000-square-foot building on a
5 2-acre permanent site (with a graveled parking and storage area) with an additional
6 0.5 acres of temporary construction disturbance.⁵³
- 7 • There will be 2.7 miles of aboveground segments of the 34.5-kV collector system
8 and 0.3 miles of 230-kV transmission line.⁵⁴
- 9 • There will be 12 junction boxes for the underground segments of the 34.5-kV
10 collector system.⁵⁵
- 11 • There will be 13.7 miles of newly-constructed access roads.⁵⁶
- 12 • The area of temporary disturbance during site restoration would be 218 acres.⁵⁷

13 In accordance with Condition 30 of the site certificate, the Department prepared a site
14 restoration estimate based on the unit costs and general costs illustrated in Table 2 of the
15 *Final Order on the Application*. The Department modified the unit cost for removal of the
16 O&M building to reflect a 4,000-square-foot building on a 2-acre permanent site. The
17 Department adjusted the subtotal to 4th Quarter 2009 dollars.⁵⁸ Condition 30 states that the
18 adjustment is to be made to the “gross cost component” before adding 1-percent of the
19 adjusted gross cost for the adjusted performance bond amount. This calculation, however,
20 would result in double-counting the performance bond amount, which is already included in
21 the “gross cost component” of Table 2. To avoid this unintended result, the Department added
22 1-percent of the adjusted subtotal for the performance bond to determine the proper adjusted
23 gross cost and then calculated the administration and contingency amounts based on the
24 adjusted gross cost. The Department’s financial assurance calculation for LJIIA is shown in
25 Table 1.

Department calculated the volume of concrete using the formula of πr^2 (3.12159 x 81), multiplying by the height (4 ft), converting the result to cubic yards and rounding up to the nearest whole cubic yard.

⁵¹ Leaning Juniper II Site Certificate Application Supplement (May 2007), response to RAI B2.

⁵² Response to Additional RAI (table) #7 and #8, pp. 6-7.

⁵³ Response to RAI, Attachment G, Table 1, p. 1, email from Jeffrey Durocher, September 21, 2009, and email from Linnea Eng, CH2M HILL, September 22, 2009.

⁵⁴ Email from Jeffrey Durocher, September 8, 2009.

⁵⁵ Email from Jeffrey Durocher, September 18, 2009.

⁵⁶ Response to RAI, Attachment G, Table 2, and email from Linnea Eng, CH2M HILL, September 22, 2009.

⁵⁷ The Department assumes that the area of temporary disturbance during site restoration would equal the area of temporary disturbance during construction, excluding the temporary disturbance areas associated with improvement of existing roads and installation of the underground segments of the collector system. The Department calculated the area of temporary disturbance that would have to be restored based on Response to Additional RAI, Attachment 4, revised Table 3, adding 0.5 acres of temporary disturbance around the O&M building and rounding the total to the nearest acre.

⁵⁸ The Department converted 2006 dollars to 4th Quarter 2009 dollars using an adjustment factor derived from current index values for the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast.” The adjustment factor was the ratio of the 4th Quarter index value (124.7361) and the Annual average index value for 2006 (116.676).

Table 1: Site Restoration Cost for LJIIA (4th Quarter 2009 Dollars)

Cost Estimate Component	Quantity	Unit Cost	Extension
<u>Turbines</u>			
Disconnect electrical, ready for disassembly (per turbine)	43	\$979	\$42,097
Remove turbine blades, hubs and nacelles (per turbine)	43	\$5,207	\$223,901
Remove turbine towers (per net ton of steel)	12,436	\$67	\$833,212
Remove and load pad transformers (per turbine)	43	\$2,250	\$96,750
Foundation and transformer pad removal (per cubic yard)	2,193	\$32	\$70,176
Restore turbine pads and turnouts (per turbine)	43	\$1,297	\$55,771
<u>Met Towers</u>			
Dismantle and dispose of met towers (per tower)	2	\$9,637	\$19,274
<u>Substation and O&M Building</u>			
Dismantle and dispose of substation	1	\$133,607	\$133,607
Dismantle and dispose of O&M building	1	\$47,156	\$47,156
<u>Transmission Line</u>			
Remove aboveground 34.5-kV collector system (per mile)	2.7	\$3,390	\$9,153
Remove 230-kV transmission line (per mile)	0.3	\$48,520	\$14,556
Remove junction boxes to 4' below grade (each)	12	\$1,322	\$15,864
<u>Access Roads</u>			
Road removal, grading and seeding (per mile)	13.7	\$74,486	\$1,020,458
<u>Temporary Disturbance Areas</u>			
Restore area disturbed during restoration work (per acre)	218	\$2,775	\$604,950
<u>General Costs</u>			
Permits, mobilization, engineering, overhead			\$444,403
<u>Subtotal</u>			\$3,631,328
Subtotal Adjusted to 4th Quarter 2009 Dollars			\$3,882,184
Performance Bond		1%	\$38,882
<u>Adjusted Gross Cost</u>			\$3,921,066
Administration and Project Management Costs		10%	\$392,101
Future Developments Contingency		10%	\$392,101
Total Site Restoration Cost			\$4,705,207
Total Site Restoration Cost (rounded to nearest \$1,000)			\$4,705,000

1 The Council modifies Condition 30 to correct the adjustment calculation as described
2 in Revision 9 at page 95. The current adjustment language would result in a double-counting
3 of the performance bond cost. The revision conforms the adjustment language to the language
4 used in Condition 31 of the *Site Certificate for the Helix Wind Power Facility* (July 31, 2009).
5 The certificate holder concurs with this modification.⁵⁹

⁵⁹ Response to Additional RAI (table) #8, p. 7.

B. LJIIB

1 The actions necessary to restore the LJIIB site to a useful, non-hazardous condition
2 are described in the *Final Order on the Application*.⁶⁰ The same types of actions would be
3 necessary to restore the LJIIB area. The Council finds that the LJIIB site (including both LJIIB
4 and LJIIB), taking mitigation into account, can be restored adequately to a useful, non-
5 hazardous condition following permanent cessation of construction or operation of the
6 facility.

7 The certificate holder estimated the site restoration cost for the LJIIB area would be
8 \$7.567 million in 2nd Quarter 2009 dollars.⁶¹ The Department calculated an independent cost
9 estimate for LJIIB, following the estimating procedure outlined in its draft “Facility
10 Retirement Cost Estimating Guide” and adjusting unit costs to 4th Quarter 2009 dollars. The
11 estimate assumed a configuration of the LJIIB components that would result in the highest
12 site restoration cost consistent with the maximum design flexibility requested by the
13 certificate holder.

14 The assumptions underlying the LJIIB cost estimate are as follows:

- 15 ● 84 2.1-MW turbines would be built in the LJIIB area.⁶²
- 16 ● The weight of metals in each turbine tower is 206.5 tons and the weight of
17 metals in each turbine nacelle is 82.7 tons.⁶³
- 18 ● Each turbine tower foundation will have 38 cubic yards of concrete to a depth
19 of three feet below grade.⁶⁴
- 20 ● There would be 13 cubic yards of concrete for each transformer pad adjacent
21 to each turbine tower.⁶⁵
- 22 ● Two permanent meteorological towers would be built.⁶⁶
- 23 ● No O&M building would be built in the LJIIB area.⁶⁷
- 24 ● One collector substation would be built in the LJIIB area.⁶⁸
- 25 ● 6.1 miles of 230-kV transmission line would be built.⁶⁹

⁶⁰ *Final Order on the Application* (September 21, 2008), pp. 18-19.

⁶¹ Response to RAI, Attachment 3.

⁶² The certificate holder would have the option to build up to 84 2.1-MW turbines (Response to Additional RAI (table) #14, p. 19).

⁶³ Email from Jeffrey Durocher, September 8, 2009. The Department assumed the weights were given in U.S. tons (short tons).

⁶⁴ In the Response to RAI, Attachment G, Table 1, p. 2, the certificate holder provided a calculation of the volume of concrete in the tower foundation from grade to three feet below grade, assuming a pedestal diameter of 18 feet. In response to the Department’s follow-up question, the certificate holder stated that the assumed height of the foundation above grade was one foot (email from Jeffrey Durocher, September 21, 2009). The Department calculated the volume of concrete using the formula of πr^2 (3.12159×81), multiplying by the height (4 ft), converting the result to cubic yards and rounding up to the nearest whole cubic yard.

⁶⁵ Leaning Juniper II Site Certificate Application Supplement (May 2007), response to RAI B2.

⁶⁶ Request for Amendment #1, Section 4, p. 6.

⁶⁷ Request for Amendment #1, Section 4, p. 6.

⁶⁸ For the purposes of a “highest-cost estimate,” the Department assumes that the certificate holder would select the 230-kV interconnection option, which includes construction of a substation in the LJIIB area.

- 1 • 6.7 miles of aboveground segments of the 34.5-kV collector system would be
2 built.⁷⁰
- 3 • There would be 20 junction boxes for the underground segments of the 34.5-
4 kV collector system.⁷¹
- 5 • 16.7 miles of newly-constructed access roads would be built to a finished
6 width of 20 feet, and 4.2 miles of newly-constructed access roads would be
7 built to a finished width of 32 feet.⁷²
- 8 • Areas of temporary disturbance during site restoration would include 160
9 acres to be graded and seeded and 377 acres to be seeded only.⁷³
- 10 • General costs are included to show the full cost estimate for LJIIB if it were
11 operated separately or sold as a separate facility. If the LJI were constructed,
12 operated and retired as a whole, including all LJI and LJIIB components,
13 the general costs (permits, mobilization, engineering, overhead) would be
14 accounted for in the financial assurance amount for LJI (as shown in Table
15 1). In that case, the general costs could be omitted in calculating financial
16 assurance for LJIIB.

17 Using these highest-cost assumptions, the Department estimated the site restoration
18 cost for LJIIB as shown in Table 2.⁷⁴

Table 2: Site Restoration Cost for LJIIB (4th Quarter 2009 Dollars)

Cost Estimate Component	Quantity	Unit Cost	Extension
<u>Turbines</u>			
Disconnect electrical, ready for disassembly (per turbine)	84	\$1,050	\$88,200
Remove turbine blades, hubs and nacelles (per turbine)	84	\$5,594	\$469,896
Remove turbine towers (per net ton of steel)	24,293	\$72.01	\$1,749,339
Remove and load pad transformers (per turbine)	84	\$2,417	\$203,028
Foundation and transformer pad removal (per cubic yard)	4,284	\$47.34	\$202,805

⁶⁹ Request for Amendment #1, Section 4, p. 4, Response to RAI, Summary of Modifications, p. 1, and email from Linnea Eng, CH2M HILL, October 7, 2009.

⁷⁰ Response to RAI, Summary of Modifications, p. 1, and email from Linnea Eng, CH2M HILL, October 7, 2009.

⁷¹ Response to Additional RAI (table) #14, pp. 19-20.

⁷² Response to RAI, Attachment 1, Table 1.

⁷³ The Department calculated the area of temporary disturbance that would have to be restored based on Response to RAI, Attachment 1, Table 2, excluding areas associated with improvement of existing roads and installation of underground collector lines and assuming the 230-kV interconnection option would be built. The Department corrected the area of temporary disturbance associated with aboveground collector lines, based on a maximum of 6.7 miles (35,376 linear feet) of aboveground collector with up to 177 support poles (spaced 200 feet apart). Areas where grading and seeding would be needed include areas around dismantled met towers and removed access roads.

⁷⁴ The Facility Retirement Cost Estimating Guide computes site restoration costs in mid-2004 dollars. In Table 2, the Department adjusted the unit costs to 4th Quarter 2009 dollars using an adjustment factor derived from current index values for the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast." The adjustment factor was the ratio of the 4th Quarter index value (124.7361) and the average of the 2nd Quarter 2004 (109.185) and 3rd Quarter 2004 (109.807) index values.

<u>Met Towers</u>			
Dismantle and dispose of met towers (per tower)	2	\$8,921	\$17,842
<u>Substation</u>			
Dismantle and dispose of substation	1	\$84,602	\$84,602
<u>Transmission line</u>			
Remove aboveground 34.5-kV collector system (per mile)	6.7	\$5,241	\$35,115
Remove 230-kV transmission line (per mile)	6.1	\$22,593	\$137,817
Remove junction boxes to 4' below grade (each)	20	\$1,420	\$28,400
<u>Access Roads</u>			
20-foot road removal, grading and seeding (per mile)	16.7	\$21,887	\$365,513
32-foot road removal, grading and seeding (per mile)	4.2	\$35,019	\$147,080
<u>Temporary Disturbance Areas</u>			
Access roads and met towers (per acre)	146	\$6,001	\$876,146
Transmission lines, laydown areas, crane paths (per acre)	377	\$2,985	\$1,125,345
<u>General Costs</u>			
Permits, mobilization, engineering, overhead			\$476,172
<u>Subtotal</u>			\$6,007,300
Performance Bond		1%	\$60,073
<u>Gross Cost</u>			\$6,067,373
Administration and Project Management Costs		10%	\$606,737
Future Developments Contingency		10%	\$606,737
Total Site Restoration Cost			\$7,280,848
Total Site Restoration Cost (rounded to nearest \$1,000)			\$7,281,000

1 Based on Table 2, the Council finds that \$7.281 million in 4th Quarter 2009 dollars is a
2 conservative estimate of the cost to restore the LJIIB site to a useful, non-hazardous
3 condition. Because this estimate is based on highest-cost assumptions, it may overstate the
4 restoration costs for LJIIB under its final design configuration. In Revision 33, the Council
5 adopts Condition 101, which would allow the certificate holder to adjust the amount of the
6 initial bond or letter of credit for LJIIB based on the final design configuration of the facility
7 based on the costs shown in Table 2, subject to Department approval.

C. Ability of the Certificate Holder to Obtain a Bond or Letter of Credit

8 OAR 345-022-0050(2) requires the Council to decide whether the certificate holder
9 has a reasonable likelihood of obtaining a bond or letter of credit, in a form and amount
10 satisfactory to the Council, to restore the LJIIB site. The combined site restoration estimates for
11 LJIA and LJIIB amount to \$11.986 million (4th Quarter, 2009 dollars).

12 In the *Final Order on the Application*, the Council found that LJWP had demonstrated
13 a reasonable likelihood of obtaining a bond or letter or credit sufficient to restore the LJIA
14 site based on a letter from Royal Bank of Scotland (Bank).⁷⁵ The letter stated that PPM
15 Energy had “sufficient available letter of credit capacity” to support a letter of credit of \$9
16 million “under its existing uncommitted financing arrangements with the Bank.”⁷⁶ The letter
17 acknowledged that the credit could be adjusted on an annual basis for inflation “subject to a

⁷⁵ *Final Order on the Application* (September 21, 2007), p. 24.

⁷⁶ The certificate holder is a subsidiary of IBR, formerly known as PPM Energy.

1 cap” of \$17 million. The letter supports a finding that the certificate holder could obtain a
2 bond or letter of credit in a sufficient amount to provide financial assurance for the LJF if
3 Amendment #1 were granted. In addition, IBR has successfully obtained financial assurance
4 necessary for other facilities that are subject to Oregon site certificates, including the
5 Klondike III Wind Project, the Klamath Cogeneration Project and the Klamath Generation
6 Peakers facility.

7 The Council finds that LJWP has demonstrated a reasonable likelihood of obtaining
8 bonds or letters or credit, satisfactory to the Council, in combined amounts adequate to restore
9 the site to a useful, non-hazardous condition.

10 In the amendment request, LJWP asks the Council to consider the cost of
11 “decommissioning security” and to take into account the following when establishing the
12 amount and timing the “security” (financial assurance):⁷⁷

- 13 • The risk of the LJIIB facility ceasing operations in the first 10 years is
14 extremely low.
- 15 • The wind turbines will have a significant resale value in the early years of
16 facility life.
- 17 • The salvage value of the turbines and towers warrants consideration.
- 18 • The landowner leases require LJWP to decommission the facility.

19 Specifically, LJWP requests the following:⁷⁸

20 LJWP prefers that the decommissioning security requirement become effective in the later
21 years of the LJIIB facility’s life (e.g., in year 15). At that point, the facility will still have
22 substantial commercial value, but decommissioning could be expected after another 15 to
23 20 years.

24 OAR 345-027-0020(8) requires the certificate holder to submit a financial assurance
25 instrument to the State of Oregon “before beginning construction of the facility.” The form
26 and amount must be “satisfactory to the Council to restore the site to a useful, non-hazardous
27 condition.” The Council finds that LJWP’s request to delay the effective date of the financial
28 assurance requirement until “the later years of the LJIIB facility’s life” conflicts with the
29 requirements of OAR 345-027-0020(8). The Council, therefore, denies the request.

Conclusions of Law

30 Based on the findings and site certificate conditions discussed above, the Council
31 concludes that LJWP would meet the Council’s Retirement and Financial Assurance Standard
32 if Amendment #1 were approved.

3. Standards about the Impacts of Construction and Operation

(a) Land Use

OAR 345-022-0030

33 *(1) To issue a site certificate, the Council must find that the proposed facility*
34 *complies with the statewide planning goals adopted by the Land Conservation and*
35 *Development Commission.*
36

⁷⁷ Request for Amendment #1, Section 4, p. 31.

⁷⁸ Request for Amendment #1, Section 4, p. 31.

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

2 ***

3 (b) *The applicant elects to obtain a Council determination under ORS*
4 *469.504(1)(b) and the Council determines that:*

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

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

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

17 (3) *As used in this rule, the “applicable substantive criteria” are criteria from the*
18 *affected local government’s acknowledged comprehensive plan and land use*
19 *ordinances that are required by the statewide planning goals and that are in effect*
20 *on the date the applicant submits the application. If the special advisory group*
21 *recommends applicable substantive criteria, as described under OAR 345-021-*
22 *0050, the Council shall apply them. If the special advisory group does not*
23 *recommend applicable substantive criteria, the Council shall decide either to make*
24 *its own determination of the applicable substantive criteria and apply them or to*
25 *evaluate the proposed facility against the statewide planning goals.*

26 (4) *The Council may find goal compliance for a proposed facility that does not*
27 *otherwise comply with one or more statewide planning goals by taking an*
28 *exception to the applicable goal. Notwithstanding the requirements of ORS*
29 *197.732, the statewide planning goal pertaining to the exception process or any*
30 *rules of the Land Conservation and Development Commission pertaining to the*
31 *exception process, the Council may take an exception to a goal if the Council*
32 *finds:*

33 (a) *The land subject to the exception is physically developed to the extent that*
34 *the land is no longer available for uses allowed by the applicable goal;*

35 (b) *The land subject to the exception is irrevocably committed as described by*
36 *the rules of the Land Conservation and Development Commission to uses not*
37 *allowed by the applicable goal because existing adjacent uses and other relevant*
38 *factors make uses allowed by the applicable goal impracticable; or*

39 (c) *The following standards are met:*

40 (A) *Reasons justify why the state policy embodied in the applicable goal*
41 *should not apply;*

1 (B) The significant environmental, economic, social and energy
2 consequences anticipated as a result of the proposed facility have been identified
3 and adverse impacts will be mitigated in accordance with rules of the Council
4 applicable to the siting of the proposed facility; and

5 (C) The proposed facility is compatible with other adjacent uses or will be
6 made compatible through measures designed to reduce adverse impacts.

7 * * *

Findings of Fact

8 In the *Final Order on the Application*, the Council found that the LJF did not comply
9 with all of the applicable substantive criteria in Gilliam County. Specifically, the Council
10 found that the LJF did not comply with Gilliam County Zoning Ordinance (GCZO) Section
11 4.020(D)(14), which limits the area that a “commercial utility facility” may occupy in an
12 Exclusive Farm Use (EFU) zone.⁷⁹ The Council then considered, under ORS
13 469.504(1)(b)(B), whether the LJF otherwise complied with the applicable statewide planning
14 goal (Goal 3). The Council found that the proposed principal use and access roads would
15 “preclude more than 20 acres from use as a commercial agricultural enterprise” and that the
16 LJF, therefore, would not comply with OAR 660-033-0130(22), which implements Goal 3.⁸⁰
17 To find compliance under ORS 469.504(1)(b)(B), the Council determined that an exception to
18 Goal 3 was justified under ORS 469.504(2).⁸¹

19 In acting on this amendment request, the Council applies the applicable substantive
20 criteria in effect on the date the certificate holder submitted the request for amendment. The
21 Planning Director of Gilliam County has confirmed that the County has not changed its
22 applicable substantive criteria for the evaluation of wind energy facilities since February 1,
23 2006 (the date the LJF preliminary application was submitted).⁸² Accordingly, the local land
24 use criteria that the Council applied in the *Final Order on the Application* are applicable to
25 this amendment request. The applicable substantive criteria are GCZO Sections 4.020(A),
26 4.020(D)(14), 4.020(J), 7.010(A)(1), 7.010(A)(2), 7.020(Q) and 7.020(T).⁸³ Because the
27 amendment request includes an extension of the construction completion date as well as an
28 expansion of the site boundary, the Council must consider whether the LJF as a whole would
29 comply with the Land Use Standard.

A. Applicable Local Criteria

GCZO Section 4.020(A): Exclusive Farm Use

30 *In an EFU Zone, the following regulations shall apply:*

31 A. *High Value Farmland.* Due to the limited amount of High Value Farmland in
32 Gilliam County, the uses for High Value Farmland are not listed in this section. If
33 a use permitted in Subsections 2 and 3 of this section is located on High Value
34 Farmland, the requirements of this section and the requirements of OAR 660,
35 Division 33, shall be used for the review.
36

⁷⁹ *Final Order on the Application* (September 21, 2007), p. 44.

⁸⁰ *Final Order on the Application* (September 21, 2007), p. 46.

⁸¹ *Final Order on the Application* (September 21, 2007), p. 51.

⁸² Request for Amendment #1, Section 4, p. 17.

⁸³ Identified by the Special Advisory Group (letter from Judge Laura Pryor, February 27, 2006).

1 GCZO Section 4.020(A) addresses uses “permitted in Subsections 2 and 3 of this
2 section.” Because the subsections of Section 4.020 are labeled as (A), (B), (C) and (D), the
3 Council interprets the ordinance as addressing uses permitted in Subsections (B) and (C).

4 The types of uses associated with a wind energy facility are uses addressed as
5 conditional uses under Subsection (D). LJIIA and LJIIB involve the same types of uses. The
6 principal use is a “commercial utility facility for the purpose of generating power for public
7 use by sale.”⁸⁴ In the *Final Order on the Application*, the Council found that the substation
8 and transmission interconnection line are “utility facilities necessary for public service” and
9 the access roads are “accessory transportation improvements.”⁸⁵

10 Accordingly, the Council finds that the LJIIB uses are not uses “permitted in
11 Subsections 2 and 3 of this section” because they are conditional uses permitted under GCZO
12 Section 4.020(D). Nevertheless, the requirements of OAR 660, Division 33, are addressed
13 herein beginning at page 32.

14 **GCZO Section 4.020(D)(14): Conditional Uses Permitted**

15 *In an EFU Zone, the following regulations shall apply:*

16 * * *

17 *D. Conditional Uses Permitted. In the EFU Zone, the following uses and their*
18 *accessory uses may be permitted if determined by the Planning Commission*
19 *during a public hearing to satisfy the applicable criteria and procedures set forth*
20 *in Section 7.040. The appropriate review criteria are identified for each use.*

21 * * *

22 *14. Commercial utility facilities for the purpose of generating power for public*
23 *use by sale. A power generation facility not located on high-value farmland shall*
24 *not preclude more than 20 acres from use as a commercial agricultural enterprise.*
25 *A power generation facility located on high-value farmland shall not preclude*
26 *more than 12 acres from use as a commercial agricultural enterprise. Approval of*
27 *a use pursuant to this subsection is subject to the review criteria of Section*
28 *4.020.H, and any other applicable criteria or provisions of law.*

29 In the *Final Order on the Application*, the Council found that the LJF would be a
30 commercial utility facility that would not be located on high-value farmland.⁸⁶ The Council
31 found that the LJF would occupy land “substantially similar” to land that Gilliam County had
32 previously addressed in issuing a Conditional Use Permit for the Leaning Juniper I.⁸⁷ The
33 County had found that the land where the Leaning Juniper I facility would be built was not
34 “high value farmland,” and the Council applied the same finding to the LJF. The Council
35 found that the area occupied by the “power generation facility” would preclude more than 20
36 acres of farmland from use as a commercial agricultural enterprise, as shown in Table 3. The
37 Council found, therefore, that the LJF did not comply with GCZO Section 4.020(D)(14).

⁸⁴ *Final Order on the Application* (September 21, 2007), p. 45.

⁸⁵ *Final Order on the Application* (September 21, 2007), pp. 45-48.

⁸⁶ *Final Order on the Application* (September 21, 2007), p. 29.

⁸⁷ *Final Order on the Application* (September 21, 2007), pp. 28-29.

Table 3: Areas Occupied by the LJIIA Components⁸⁸

Structure	LJ-North (acres)	LJ-South (acres)	LJF Total (acres)
Principal use			
Turbine towers, including pad areas and road turnouts	2.42	5.63	8.05
Meteorological towers	0.02	0.06	0.08
Aboveground 34.5-kV collector line			0.04
O&M facilities	2.5	2.5	5
Subtotal	4.94	8.19	13.17
Access roads	17.06	33.05	50.11
Total	22	41.24	63.28

1 OAR 660-033-0020(1)(a)(A) defines “agricultural land” as land in Natural Resources
2 Conservation Service (NRCS) soil capability classes I-VI in Eastern Oregon. Class VII soils
3 have very severe limitations that make them unsuitable for cultivation; Class VIII soils have
4 limitations that nearly preclude their use for commercial crop production.⁸⁹ The definition of
5 “agricultural land” nevertheless provides that land in capability classes other than I-VI “that is
6 adjacent to or intermingled with” lands in classes I-VI “within a farm unit” shall be
7 inventoried as agricultural land.⁹⁰ The Council finds that all Class VII and Class VIII soils
8 within the LJF site boundary should be inventoried as agricultural land.

9 ORS 215.710(1) and OAR 660-033-0020(8) define “high value farmland” as land “in
10 a tract composed predominantly of soils that are... [either irrigated or not irrigated and]
11 classified prime, unique, Class I or II” by the NRCS.⁹¹ “Tract” means one or more contiguous
12 lots or parcels in the same ownership.⁹²

13 The amendment request includes a figure that identifies the location of Class I and
14 Class II soils within the LJF micro-siting area.⁹³ The figure shows that at least some LJF
15 components would be located on Class I or Class II soils. These components are located on
16 “high value farmland” if the underlying “tracts” are composed “predominantly” of Class I or
17 Class II soils. The Council defines “non-high-value farmland” as land that is in a tract that is
18 not composed predominantly of Class I or Class II soils. The Department requested
19 information about the “tracts” underlying the LJF in order to determine the extent of high-
20 value farmland. The certificate holder noted that using “tracts” for purposes of analysis “could
21 reach lands considerably outside the Facility site boundary, as a single landowner may own
22 multiple contiguous parcels, which would then skew the analysis for purposes of determining
23 a facility’s potential impact to high-value farmland soils.”⁹⁴ The certificate holder provided

⁸⁸ This table was included as Table 5 in the *Final Order on the Application* (September 21, 2007).

⁸⁹ NRCS, “Land Capability Classification,” Soil Survey Report of Umatilla County Area (November 1988).

⁹⁰ OAR 660-033-0020(1)(b).

⁹¹ ORS 215.710(6) provides that the applicable “soil classes, soil ratings or other soil designations” are those of the NRCS “in its most recent publication for that class, rating or designation before November 4, 1993.”

⁹² OAR 660-033-0020(10).

⁹³ Request for Amendment #1, Attachment 1, Figure 12.

⁹⁴ Response to Additional RAI (table) #11, p. 10.

1 estimates of the acres of Class I and Class II soils occupied by the LJIB components as a
 2 conservative estimate of the impact on high-value farmland soils in the LJIB area.

3 As shown in Table 4, the LJIB principal use and access roads would occupy up to 24
 4 acres of high-value farmland and 48 acres of non-high-value farmland.⁹⁵ Therefore, these
 5 components would occupy more than 12 acres of high-value farmland and more than 20 acres
 6 non-high-value farmland.

Table 4: Areas Occupied by the LJIB Components⁹⁶

Structure	Total Permanent Impacts (acres)	High-Value Farmland (acres)	Non-High-Value Farmland (acres)
Principal Use			
Turbine towers, including pad areas	3.19	1.37	1.82
Meteorological towers	0.04	0.02	0.02
Aboveground 34.5-kV collector segments	0.03	0.01	0.02
Subtotal	3.25	1.39	1.86
Access roads ⁹⁷	65.61	22.76	42.85
Interconnection system ⁹⁸			
34.5-kV transmission line structures	0.09	0	0.09
230-kV transmission line structures	0.06	0	0.06
LJIB collector substation	3.00	0	3.00

7 Based on the data in Table 3 and Table 4, the Council finds that the LJF would not
 8 comply with GCZO Section 4.020(D)(14), if the amendment request were approved. The
 9 Council must therefore decide, under ORS 469.504(1)(b)(B), whether the LJF would
 10 “otherwise comply with the applicable statewide planning goals.” We discuss compliance
 11 with the applicable statewide planning goal below at page 32.

12 In addition to the acreage limitation, GCZO Section 4.020(D)(14) provides that
 13 approval of a commercial utility facility is subject to the review criteria of Section 4.020.H:

14 *H. Specific Review Criteria. In the EFU Zone, certain uses are subject to specific*
 15 *criteria, in addition to any other applicable criteria. The specific provisions of this*
 16 *subsection apply only when referenced within the list of uses included in*
 17 *Subsections 4.020.B, C and D.*

18 *1. The use may be approved only where the County finds that the use will not:*

⁹⁵ The estimation the maximum area of impact assumes construction of a second facility substation in the LJIB area and a 230-kV transmission line from that substation to the LJIA substation. Accordingly, the impact on high-value farmland would include the principal use (1.39 acres) and the access roads (22.76 acres) for a total of 24.15 acres. The impact on non-high-value farmland would include the principal use (1.86 acres), access roads (42.85 acres), the 230-kV transmission line (0.06 acres) and the substation (3.0 acres) for a total of 47.78 acres.

⁹⁶ Based on revised Table 2 (email from Linnea Eng, CH2M HILL, September 18, 2009).

⁹⁷ Area shown for the access roads includes 0.321 acres of impact to Class VII soil. This impact is associated almost entirely with roads (email from Linnea Eng, CH2M HILL, September 18, 2009)

⁹⁸ The option to build a 230-kV transmission line with a new substation would occupy the greatest area. The 34.5-kV option is shown for completeness. Only one option would be built.

- 1 a. Force a significant change in accepted farm or forest practices on
2 surrounding lands devoted to farm or forest use; or
3 b. Significantly increase the cost of accepted farm or forest practices on
4 surrounding lands devoted to farm or forest use.

5 These criteria are the same as the criteria in GCZO Section 7.020(Q) and are discussed
6 below at page 26.

7 **GCZO Section 4.020(J): Property Development Standards**

8 *In an EFU Zone, the following regulations shall apply:*

9 * * *

10 J. Property Development Standards. *In the EFU Zone, the following standards*
11 *apply to residential and nonresidential development.*

12 1. *Building Height. No limitations.*

13 2. *Setbacks*

14 a. *The front and rear yard setbacks from the property line shall be 25 feet.*

15 b. *The side yard setbacks from the property line shall be 25 feet.*

16 In the *Final Order on the Application*, the Council adopted Condition 39 to
17 incorporate the setback requirements of GCZO Section 4.020(J) and the applicant’s proposed
18 50-foot setback for the O&M buildings and substation from property lines.⁹⁹ In the
19 amendment request, LJWP proposes a modification of Condition 39 “to reflect new safety
20 standards being implemented at other facilities.”¹⁰⁰ The Department recommended the
21 modifications to Condition 39 discussed in Revision 12 at page 97.¹⁰¹ The recommended
22 modifications would comply with the setback requirements of GCZO Section 4.020(J).

23 **GCZO Section 7.010(A): General Approval Criteria and Conditions**

24 *A conditional use listed in this ordinance shall be permitted, altered or denied in*
25 *accordance with the standards and procedures of this ordinance and this article*
26 *by action of the Planning Commission or Planning Director. In the case of a use*
27 *existing prior to the effective date of this ordinance, and classified in this*
28 *ordinance as a Conditional Use, a change in use or in lot area or an alteration of*
29 *a Conditional Use, a change in use or in lot area or an alteration of structure*
30 *shall conform with the requirements for a Conditional Use.*

31 A. General Approval Criteria and Conditions

32 1. *In addition to criteria, standards and conditions that may be set forth in a*
33 *specific Zone, this Article, or other regulations applicable to a specific*
34 *Conditional Use shall not be approved or permitted unless the following criteria*
35 *are met. A Conditional Use may be approved on the Condition or Conditions that*
36 *the applicant obtain and maintain compliance with other permits and approvals*
37 *required.*

38 a. *The proposed use shall be in compliance with the applicable*
39 *Comprehensive Plan designation and policies.*

⁹⁹ *Final Order on the Application* (September 21, 2007), pp. 31-32.

¹⁰⁰ Request for Amendment #1, Section 4, p. 50.

¹⁰¹ The certificate holder agrees with the proposed revision of Condition 39 (Response to Additional RAI (table) #12, p. 12, and Attachment 6.

1 *b. As applicable, sewage and/or solid waste disposal methods shall be*
2 *provided in compliance with applicable local, State and Federal*
3 *regulations.*

4 *c. Proposal shall be found to be in compliance or conditioned upon*
5 *compliance with applicable air and noise pollution standards.*

6 *d. Required access shall be legally established, available, and adequate to*
7 *serve the proposed use or provisions to provide such evident.*

8 *e. Public services deemed necessary shall be available or provisions for*
9 *such provided and no use shall be approved which is found to exceed the*
10 *carrying capacities of affected public services unless there are provisions*
11 *to bring such capacities up to the need.*

12 *f. Proposal shall be in compliance with the applicable standards and*
13 *limitations of the primary and combining zone as may be applicable.*

14 *g. No use shall be approved which is found to have a significant adverse*
15 *impact on resource-carrying capacities unless there are provisions for*
16 *mitigating such impact.*

17 *h. No use shall be approved which is found to exceed the carrying*
18 *capacities of affected public services and facilities.*

19 *i. All required State and Federal permits or approvals have been obtained*
20 *or will be as a condition of approval.*

21 *2. In addition to specific standards and/or conditions set forth by the*
22 *applicable zone, this article or some other applicable regulations, other conditions*
23 *may be imposed that are determined necessary to avoid a detrimental impact, and*
24 *to otherwise protect the best interests of the surrounding area and the County as a*
25 *whole. Such conditions may include, but are not limited to, the following:*

26 *a. Limiting the manner in which the use is conducted including restricting*
27 *the time an activity may take place and restraints to minimize such*
28 *environmental effects as noise, vibration, air pollution, glare and odor.*

29 *b. Establishing a special setback or other open space or lot area or*
30 *dimension.*

31 *c. Limiting the height, size or location of a building or other structure.*

32 *d. Designating the size, number, improvements, location and nature of*
33 *vehicle access points and parking or loading areas.*

34 *e. Limiting or otherwise designating the number, size, location, height,*
35 *and lighting of signs and outdoor lighting.*

36 *f. Requiring diking, screening, fencing, landscaping or another facility to*
37 *protect adjacent or nearby property and designating standards for its*
38 *installation and maintenance.*

39 *g. Protecting and preserving existing trees, vegetation, water resources,*
40 *wildlife habitat or other significant natural resources.*

- 1 h. *Limiting the term of the Conditional Use Permit to a specific time.*
- 2 i. *Requiring necessary on-site or off-site improvements and maintenance.*
- 3 j. *Requiring the holder of a Conditional Use Permit to obtain review,*
- 4 *renewal, or reapplication approval of the permit in the event that there is*
- 5 *an increase in impact from the use on public facilities beyond that which*
- 6 *was projected at the time of initial approval.*

7 GCZO Section 7.010(A)(1) contains a list of criteria that must be met “in addition to
8 the criteria, standards and conditions that may be set forth in a specific Zone, this Article, or
9 other regulations applicable to a specific Conditional Use.” GCZO Section 7.010(A)(2)
10 describes conditions that “may be imposed...[if] determined necessary to avoid a detrimental
11 impact, and to otherwise protect the best interests of the surrounding area and the County as a
12 whole.” In the *Final Order on the Application*, the Council addressed these ordinances and
13 made findings with regard to the LJIA components, and those findings are incorporated
14 herein by this reference.¹⁰² The Council finds that the previous findings with regard to the
15 LJIA components apply as well to the proposed LJIB components. In finding compliance
16 with GCZO Section 7.010(A)(1) and (2), the Council adopted site certificate Conditions 3, 28,
17 70, 75, 97, 98, 99 and 100, and the Council applies these same conditions to LJIB.

18 **GCZO Section 7.020(Q): Conditional Uses in Exclusive Farm Use Zones**

19 *In addition to the standards of the zone in which the conditional use is located and*
20 *the general standards of this ordinance, conditional uses shall meet the following*
21 *standards:*

22 * * *

23 **Q. Conditional Uses in Exclusive Farm Use Zones**

24 1. *A Type I or Type II Conditional Use in an Exclusive Farm Use Zone may be*
25 *approved only when the Planning Director or Hearings body finds that the use*
26 *will not:*

- 27 a. *Force a significant change in accepted farm or forest practices on*
- 28 *surrounding lands devoted to farm or forest use; or*
- 29 b. *Significantly increase the cost of accepted farm or forest practices on*
- 30 *surrounding lands devoted to farm or forest use.*

31 2. *An applicant for a conditional use in the Exclusive Farm Use Zone may*
32 *demonstrate that the standards for approval set forth in Subsection A of this*
33 *section will be satisfied through the imposition of conditions. Any condition so*
34 *imposed shall be clear and objective.*

35 In the *Final Order on the Application*, the Council found that the uses associated with
36 the LJF include a commercial utility facility (allowable under GZCO 4.020(D)(14)),
37 transportation improvements (allowable under GCZO 4.020(D)(25)) and utility facilities
38 necessary for public service (allowable under GCZO 4.020(D)(29)).¹⁰³ Each of these uses is a
39 “Type II” conditional use under the GCZO.

¹⁰² *Final Order on the Application* (September 21, 2007), pp. 32-36.

¹⁰³ *Final Order on the Application* (September 21, 2007), p. 37.

1 The Council found that the lands devoted to farm use within the analysis area
2 surrounding the LJIIA components are used for the cultivation of wheat and barley and for
3 cattle grazing.¹⁰⁴ Similar farm uses occur adjacent to the LJIIB components.¹⁰⁵ The Council
4 made findings regarding the impacts of construction and operation of the LJF on accepted
5 farm practices.¹⁰⁶ Those findings are incorporated herein by this reference and apply as well
6 to describe the impacts of construction and operation of LJIIB. The Council finds that the
7 proposed LJIIB uses would comply with GCZO Section 7.020(Q).

8 **GCZO Section 7.020(T): Wind Power Generation Facility Siting Requirements**

9 *In addition to the standards of the zone in which the conditional use is located and*
10 *the general standards of this ordinance, conditional uses shall meet the following*
11 *standards:*

12 * * *

13 **T. Wind Power Generation Facility Siting Requirements**

14 *1. Purpose. The Gilliam County Facility Siting Requirements are intended to*
15 *establish a local conditional use permitting process that is clear, timely, and*
16 *predictable as well as encompasses important local issues such as the health,*
17 *safety and welfare of citizens in Gilliam County.*

18 *2. Definitions*

19 *a. "Commercial Wind Power Generation." An activity carried out for*
20 *monetary gain using one or more wind turbine generators that has a*
21 *combined generating capacity greater than 1 MW.*

22 *b. "Decommissioning Fund." An adequate financial vehicle dedicated and*
23 *maintained with appropriate yearly adjustments to assure the money to*
24 *dismantle the Wind Power Generation Facility and to restore the site to a*
25 *useful, nonhazardous condition.*

26 *c. "Wind Power Generation Facility." An energy facility that consists of*
27 *one or more wind turbines or other such devices and their related or*
28 *supporting facilities that produce electric power from wind and are:*

29 *(1) Connected to a common switching station; or*

30 *(2) Constructed, maintained, or operated as a group of devices.*

31 *3. Procedure. The procedure for taking action on the siting of a facility is a*
32 *request for a conditional use. A public hearing pursuant to Article 7 shall be held*
33 *to determine if the applicant meets the siting requirements for a Wind Power*
34 *Generation Facility. The requirement for a hearing will not apply to proposed*
35 *facilities for which EFSC is making the land use decision.*

36 *4. Wind Power Generation Facility Siting Requirements. The requirements set*
37 *out in this section shall apply for the application and review of the siting of a Wind*
38 *Power Generation Facility and the issuance of a Gilliam County Facility*
39 *Conditional Use Permit.*

¹⁰⁴ *Final Order on the Application* (September 21, 2007), p. 37.

¹⁰⁵ Response to RAI (table), p. 14 (response to Request #8).

¹⁰⁶ *Final Order on the Application* (September 21, 2007), pp. 37-38.

1 a. *The following information shall be provided as part of the*
2 *application.*¹⁰⁷

3 * * *

4 In the *Final Order on the Application*, the Council found that subsections 1, 2, 3 and
5 4(a) of GCZO 7.020(T) are definitional and procedural ordinances that do not contain
6 substantive land use standards applicable to the proposed use.¹⁰⁸

7 *b. Gilliam County may impose clear and objective conditions in*
8 *accordance with the County Comprehensive Plan, County Development*
9 *Code and State law, which Gilliam County considers necessary to protect*
10 *the best interests of the surrounding area, or Gilliam County as a whole.*

11 The site certificate contains conditions that were reviewed by the Gilliam County
12 Planning Department. The Gilliam County Planning Department has not recommended any
13 new or different conditions with regard to LJIIB.¹⁰⁹

14 *c. Prior to commencement of any construction, all other necessary permits*
15 *shall be obtained, e.g., Gilliam County Zoning Permit, road access and*
16 *other permits from the Gilliam County Public Works Department, and from*
17 *the Oregon Department of Transportation.*

18 Condition 28 requires the certificate holder to obtain all necessary state and local
19 permits or approvals required for construction.

20 *d. The following requirements and restrictions apply to the siting of a*
21 *facility:*

22 (1) *The Wind Power Generation Facility shall be on property zoned*
23 *EFU, and no portion of the facility shall be within 3,520 feet of*
24 *properties zoned residential use or designated on the*
25 *Comprehensive Plan as residential. (For clarification purposes of*
26 *this section, EFU Zones are not considered zoned for residential*
27 *use.)*

28 The proposed LJIIB components would be located entirely on land zoned EFU.
29 Condition 39 incorporates the setback of 3,520 feet required by GCZO Section
30 7.020(T)(4)(d)(1).

31 (2) *Reasonable efforts shall be made to blend the wind facility's towers*
32 *with the natural surroundings in order to minimize impacts upon*
33 *open space and the natural landscape.*

34 In the *Final Order on the Application*, the Council found that the LJIIB would comply
35 with this ordinance requirement to make “reasonable efforts” to “blend the wind facility’s
36 towers with the natural surroundings.”¹¹⁰ The Council’s previous findings apply as well to the

¹⁰⁷ The omitted subsections of GCZO Section 7.020(T)(4)(a) describe the contents of a CUP application for a wind power generating facility.

¹⁰⁸ Final Order on the Application (September 21, 2007), p. 39.

¹⁰⁹ Email from Susie Anderson, Gilliam County Planning Director, September 21, 2009.

¹¹⁰ Final Order on the Application (September 21, 2007), p. 40.

1 LJIIB components. The Council adopted Conditions 90 and 92 to address turbine tower colors
2 and aviation warning lights.

3 *(3) Reasonable efforts shall be taken to protect and to preserve existing*
4 *trees, vegetation, water resources, wildlife habitat or other*
5 *significant natural resources.*

6 *(4) The turbine towers shall be designed and constructed to discourage*
7 *bird nesting and wildlife attraction.*

8 In the *Final Order on the Application*, the Council found that the LJF would comply
9 with GCZO Section 7.020(T)(4)(d)(3) and (4).¹¹¹ Compliance with these requirements is
10 addressed in the discussion of the Council’s Threatened and Endangered Species Standard
11 below at page 61 and Fish and Wildlife Habitat Standard below at page 63. The potential
12 impact on water resources is addressed in the discussion of the Ground Water Act below at
13 page 87. The effect of the facility on wetlands and other waters of the state protected by the
14 Removal/Fill Law is addressed below at page 86. For the reasons discussed in those sections,
15 the Council finds that the LJIIB components would comply with GCZO Section
16 7.020(T)(4)(d)(3) and (4).

17 *(5) The turbine towers shall be of a size and design to help reduce*
18 *noise or other detrimental effects.*

19 In the *Final Order on the Application*, the Council found that the LJF would comply
20 with the state’s Noise Control Regulations.¹¹² Compliance of the LJIIB components with the
21 noise regulations is discussed below at page 79. Measures to reduce other “detrimental
22 effects” from the LJIIB components are addressed in the discussion of the Council’s Public
23 Health and Safety Standards for Wind Energy Facilities below at page 55 and in the
24 discussion of public safety issues beginning on page 89. Transmission line and electrical
25 safety is discussed below at page 59. For the reasons discussed in the referenced sections, the
26 Council finds that the LJIIB would comply with GCZO Section 7.020(T)(4)(d)(5).

27 *(6) Private access roads shall be gated to protect the facility and*
28 *property owners from illegal or unwarranted trespass, and illegal*
29 *dumping and hunting.*

30 Condition 43 incorporates the requirements of GCZO Section 7.020(T)(4)(d)(6).

31 *(7) Where practicable the electrical cable collector system shall be*
32 *installed underground, at a minimum depth of 3 feet; elsewhere the*
33 *cable collector system shall be installed to prevent adverse impacts*
34 *on agriculture operations.*

35 Condition 78 requires the certificate holder to install the collector system underground
36 to the extent practicable. The Council modifies Condition 78 to limit the aboveground
37 collector line to no more than 30 percent of the collector system and to specify that
38 underground collector line be installed at least three feet below grade. The certificate holder
39 stated that the underground collector lines would be buried “approximately 3 feet below the

¹¹¹ *Final Order on the Application* (September 21, 2007), p. 40.

¹¹² *Final Order on the Application* (September 21, 2007), pp. 40-41.

1 ground surface.”¹¹³ Condition 40 requires the certificate holder to consult with area
2 landowners and lessees during construction and to implement measures to avoid adverse
3 impact to farming practices. Based on these conditions, the Council finds that the LJIB
4 components would comply with GCZO Section 7.020(T)(4)(d)(7).

5 (8) *Required permanent maintenance/operations buildings shall be*
6 *located off-site in one of Gilliam County’s appropriately zoned*
7 *areas, except that such a building may be constructed on-site if:*

8 (a) *The building is designed and constructed generally*
9 *consistent with the character of similar buildings used by*
10 *commercial farmers or ranchers; and*

11 (b) *The building will be removed or converted to farm use upon*
12 *decommissioning of the Wind Power Generation Facility consistent*
13 *with the provisions of this section.*

14 The site certificate authorizes the construction of up to two O&M buildings within the
15 LJIA area. The certificate holder does not propose to build any additional O&M buildings
16 within the LJIB area. In the *Final Order on the Application*, the Council found that the O&M
17 buildings proposed for the LJIA area would comply with GCZO Section
18 7.020(T)(4)(d)(8).¹¹⁴

19 (9) *A Wind Power Generation Facility shall comply with the Specific*
20 *Safety Standards for Wind Facilities delineated in OAR 345-024-*
21 *0010 (as adopted at time of application).*

22 Compliance with the Council’s Public Health and Safety Standards for Wind Energy
23 Facilities (OAR 345-024-0010) is discussed below at page 55.

24 (10) *To the extent feasible, the County will accept information*
25 *presented by an application for an EFSC proceeding in the form*
26 *and on the scheduled required by EFSC.*

27 This requirement is a procedural provision in the County ordinance. It is not a
28 substantive land use standard applicable to the proposed facility.

29 5. *Decommissioning/Dismantling Process. The applicant’s dismantling of*
30 *incomplete construction and/or decommissioning plan for the Wind Power*
31 *Generation Facility shall include the following information*¹¹⁵

32 * * *

33 g. *For projects sited by EFSC, compliance with EFSC’s financial*
34 *assurance and decommissioning standards shall be deemed to be in compliance*
35 *with the dismantling and decommissioning requirements of this Section*
36 *152.524.*¹¹⁶

¹¹³ Request for Amendment #1, Section 4, p. 3.

¹¹⁴ *Final Order on the Application* (September 21, 2007), p. 41.

¹¹⁵ Omitted subsections describe the required content of a decommissioning plan, including site restoration, the County bond requirement and arbitration.

¹¹⁶ This cross-reference appears in an early draft of the Umatilla County wind ordinance, which Gilliam County apparently used as a model for drafting parts of GCZO Section 7.020(T). In context, this cross-reference refers to subsection (5) of GCZO Section 7.020(T).

1 The Council finds that the proposed LJIB would comply with the Council’s Financial
2 Assurance Standard for the reasons discussed above beginning at page 12. Conditions 8, 9,
3 16, 30 and 31 require the certificate holder to restore the site and to provide adequate financial
4 assurance to the State for site restoration.

5 6. *Wind Power Generation Facility Siting Subsequent Requirements*

6 a. *A bond or letter of credit shall be established for the dismantling of*
7 *uncompleted construction and/or decommissioning of the facility. (See*
8 *§152.524.)¹¹⁶ For projects being sited by the State of Oregon’s Energy*
9 *Facility Siting Council (EFSC), the bond or letter of credit required by*
10 *EFSC will be deemed to meet this requirement.*

11 Conditions 8 and 30 require the certificate holder to provide financial assurance for
12 site restoration.

13 b. *The actual latitude and longitude location or Stateplane NAD 83(91)*
14 *coordinates of each turbine tower, connecting lines, and transmission lines shall*
15 *be provided to Gilliam County once commercial electrical production begins.*

16 c. *A summary of as-built changes in the facility from the original plan, if*
17 *any, shall be provided by the owner/operator.*

18 Condition 44 requires the certificate holder to provide the actual location of turbine
19 towers, connecting lines and transmission lines and a summary of as-built changes as required
20 by this County provision within 90 days after beginning operation of the LJV. The Council
21 modifies Condition 44 to require the certificate holder to provide this locational information
22 within 90 days after beginning operation of any phase of construction.

23 d.

24 (1) *The Wind Power Generation Facility requirements shall be facility-*
25 *specific, but can be amended as long as the facility does not exceed the*
26 *boundaries of the Gilliam County Conditional Use Permit where the*
27 *original facility was constructed.*

28 (2) *An amendment to the conditional use permit shall be required if*
29 *proposed facility changes would:*

30 (a) *Increase the land area taken out of agricultural production by*
31 *an additional 20 acres or more;*

32 (b) *Increase the land area taken out of agricultural production*
33 *sufficiently to trigger taking a Goal 3 exception;*

34 (c) *Require an expansion of the established facility boundaries;*

35 (d) *Increase the number of towers;*

36 (e) *Increase generator output by more than 25 percent relative to*
37 *the generation capacity authorized by the initial permit due to the*
38 *repowering or upgrading of power generation capacity.*

39 *No amendment would be required if an expansion of power-generating*
40 *capacity is due to technology upgrades installed within the existing*
41 *boundaries of the established Wind Power Generation Facility.*

42 *Notification by the facility owner/operator to the Gilliam County*
43 *Planning Department of nonsignificant changes is encouraged, but not*

1 *required. An amendment to a Site Certificate issued by EFSC will be*
2 *governed by the rules for amendments established by EFSC.*

3 GCZO Section 7.020(T)(6)(d) describes the County’s procedure for amendment of a
4 CUP. The provisions do not describe substantive land use criteria applicable to siting the
5 proposed facility.

6 *e. Within 120 days after the end of each calendar year, the facility*
7 *owner/operator shall provide Gilliam County an annual report including the*
8 *following information:*

- 9 (1) *Energy production by month and year.*
- 10 (2) *Nonproprietary information about wind conditions (e.g., monthly*
11 *averages, high wind events, bursts).*
- 12 (3) *A summary of changes to the facility that do not require facility*
13 *requirement amendments.*
- 14 (4) *A summary of the avian monitoring program – bird injuries,*
15 *casualties, positive impacts on area wildlife and any*
16 *recommendations for changes in the monitoring program.*
- 17 (5) *Employment impacts to the community and Gilliam County during*
18 *and after construction.*
- 19 (6) *Success or failures of weed control practices.*
- 20 (7) *Status of the decommissioning fund.*
- 21 (8) *Summary comments – any problems with the projects, any*
22 *adjustments needed, or any suggestions.*

23 *The annual report requirement may be discontinued or required at a less frequent*
24 *schedule by the County. The reporting requirement and/or reporting schedule*
25 *shall be reviewed, and possibly altered, at the request of the facility*
26 *owner/operator. (OPTION: For facilities under EFSC jurisdiction and for which*
27 *an annual report is required, the annual report to EFSC satisfies this*
28 *requirement.)*

29 Condition 21 requires certificate holders to report to the Council every six months
30 during construction and annually after beginning construction. The requirement to submit a
31 semiannual construction report applies to each phase of construction of a facility.

B. Applicable Statewide Planning Goals

32 For the reasons discussed above, the LJF (including the changes proposed by the
33 amendment request) would comply with the applicable substantive criteria recommended to
34 the Council by Gilliam County except GCZO Section 4.020(D)(14), which limits the area that
35 a “commercial utility facility” may occupy as a conditional use in an EFU zone. Because the
36 facility does not comply with all applicable local land use criteria, the Council must
37 determine, under ORS 469.504(1)(b)(B), whether the facility would “otherwise comply with
38 the applicable statewide planning goals.” For a use located within an EFU zone, the
39 “applicable statewide planning goal” is Goal 3, which is the Agricultural Lands goal. As
40 expressed in *Oregon’s Statewide Planning Goals and Guidelines*, Goal 3 is:

1 ***To preserve and maintain agricultural lands.***

2 *Agricultural lands shall be preserved and maintained for farm use, consistent with*
3 *existing and future needs for agricultural products, forest and open space and with*
4 *the state’s agricultural land use policy expressed in ORS 215.243 and 215.700.*

5 Consistent with Goal 3, Gilliam County has designated the EFU zone to preserve
6 agricultural lands. Under Goal 3, non-farm uses are permitted within a farm use zone as
7 provided under ORS 215.283. To find compliance with ORS 215.283, the Council must
8 determine whether the proposed land uses fit within the scope of the uses permitted on EFU
9 land described in ORS 215.283(1), (2) or (3).

10 In the *Final Order on the Application*, the Council found that the principal use
11 associated with the LJF is a “commercial utility facility for the purpose of generating power
12 for public use by sale” that is allowable under ORS 215.283(2)(g).¹¹⁷ The Council found that
13 the substation and transmission interconnection line are “utility facilities necessary for public
14 service” that are allowable under ORS 215.283(1)(d) and that the access roads are allowable
15 under ORS 215.283(3). The LJIB components proposed by the amendment request involve
16 the same land uses as the LJIA components. The Council makes the same findings for the
17 LJIB components with regard to the applicable sections of ORS 215.283.

18 ORS 215.283(2)(g) authorizes “commercial utility facilities for the purpose of
19 generating power for public use by sale” on land in an EFU zone. OAR Chapter 660, Division
20 33, contains the Land Conservation and Development Commission (LCDC) administrative
21 rules for implementing the requirements for agricultural land as defined by Goal 3. OAR 660-
22 033-0120 (Table 1) lists the “commercial utility facility” use as a type “R” use (“use may be
23 approved, after required review”). Prior to the effective date of OAR 660-033-0130(37), the
24 standards found in OAR 660-033-0130(5) and (22) applied to a wind power facility proposed
25 to be located on non-high-value farmland and OAR 660-033-0130(5) and (17) applied to such
26 a facility proposed to be located on high-value farmland.

27 OAR 660-033-0130(37) became effective on January 2, 2009.¹¹⁸ At the same time,
28 LCDC adopted amendments to OAR 660-033-0120 (Table 1) that added reference to a “wind
29 power generation facility” as a distinct type “R” use. The amendments provided that OAR
30 660-033-0130(5) and (37) applied to wind power generation facilities. The effect of these
31 amendments was to eliminate the 12-acre and 20-acre restrictions on wind power generation
32 facilities that are contained in OAR 660-033-0130(17) and (22) and to impose, instead, new
33 restrictions on wind power generation facilities contained in OAR 660-033-0130(37).

34 The applicability of OAR 660-033-0130(5) did not change. OAR 660-033-0130(5)
35 provides that the proposed land use must not force a significant change in accepted farm
36 practices on surrounding farmland and must not significantly increase the cost of accepted
37 farm practices. These provisions are incorporated in GCZO Section 7.020(Q), discussed
38 above at page 26. The Council finds that the LJF, including the LJIB components proposed
39 in the amendment request, would comply with OAR 660-033-0130(5).

¹¹⁷ *Final Order on the Application* (September 21, 2007), p. 45. The Council found that the power collection system, meteorological towers, control system and O&M building were part of the principal use.

¹¹⁸ The provision became effective upon filing (OAR 660-033-0160).

1 As of the date the certificate holder submitted the amendment request, Gilliam County
2 had not incorporated the changes to OAR 660-033-0120 and OAR 660-033-0130 into the
3 local zoning ordinance, and the acreage restrictions in GCZO Section 4.020(D)(14) therefore
4 apply as discussed above at page 21. Because ORS 469.504(1)(b)(B) authorizes the Council
5 to determine compliance with the statewide planning goals directly, the Department believes
6 that the Council may conclude that the LJF (including the LJIB components) complies with
7 the statewide planning goals if the Council finds that LJF complies with OAR 660-033-0120
8 and OAR 660-033-0130, as amended January 2, 2009. Nevertheless, for completeness and in
9 case the Department is later found to be incorrect about the applicability of the amended
10 LCDC rules, an analysis of both the “old” (before the January 2009 amendments) and “new”
11 rules is presented below.

12 **The Old Rules**

13 OAR 660-033-0130(17)

14 (17) A power generation facility shall not preclude more than 12 acres from use as
15 a commercial agricultural enterprise unless an exception is taken pursuant to
16 OAR chapter 660, division 4.

17 OAR 660-033-0130(22)

18 (22) A power generation facility shall not preclude more than 20 acres from use as
19 a commercial agricultural enterprise unless an exception is taken pursuant to ORS
20 197.732 and OAR chapter 660, division 004.

21 Under OAR 660-033-0120, the 12-acre limitation described in OAR 660-033-
22 0130(17) applies to components of a power generation facility located on high-value
23 farmland. The 20-acre limitation described in OAR 660-033-0130(22) applies to agricultural
24 land that is not high-value farmland. Definitions of “agricultural land,” “high-value farmland”
25 and “non-high-value farmland” are discussed above at page 22.

26 In the *Final Order on the Application*, the Council found that the LJIA access roads
27 are “accessory transportation improvements” that are necessary for the operation and
28 maintenance of the facility.¹¹⁹ The Council found, therefore, that the access roads are subject
29 to the standards and requirements applicable to the principal use. The Council found that the
30 LJIA substation and interconnection line are within the scope of ORS 215.283(1)(d), which
31 allows “utility facilities necessary for public service” on EFU land subject to the provisions of
32 ORS 215.275.¹²⁰ The Council, therefore, analyzed the substation and interconnection line
33 separately. The Council found that the substation and interconnection line would comply with
34 the provisions of ORS 215.275. The Council makes the same findings for the LJIB access
35 roads, substation and interconnection line for the reasons discussed in the *Final Order on the*
36 *Application*.¹²¹

37 As shown in Table 3 above at page 22, the LJIA components (principal use and
38 access roads) would occupy more than 20 acres of agricultural land that is not high-value

¹¹⁹ *Final Order on the Application* (September 21, 2007), pp. 46-47.

¹²⁰ *Final Order on the Application* (September 21, 2007), p. 47.

¹²¹ If OAR 660-033-0130(37) is applicable, the LJF access roads, substation and interconnection line would be part of the “wind power generation facility” as defined by that rule and would not require separate analysis.

1 farmland.¹²² As shown in Table 4 (at page 23), the LJIIB principal use and access roads would
2 occupy approximately 24 acres of high-value farmland and approximately 48 acres of non-
3 high-value farmland. Because these components would occupy more than 12 acres of high-
4 value farmland and more than 20 acres of land that is not high-value farmland, the Council
5 finds that the LJF does not comply with OAR 660-033-0130(17) and (22). Based on this
6 finding, the LJF does not comply with the rules implementing Goal 3.

7 **Goal 3 Exception**

8 If the old rules apply, to find compliance with the Land Use Standard under ORS
9 469.504(1)(b)(B), the Council must determine whether an exception to Goal 3 is justified
10 under ORS 469.504(2).¹²³ The Council finds that a Goal 3 exception is justified for the
11 reasons discussed below.

12 ORS 469.504(2)(c) sets out the standards that must be met for the Council to take a
13 “reasons” exception to a statewide planning goal:

14 (A) *Reasons justify why the state policy embodied in the applicable goal should not*
15 *apply;*

16 (B) *The significant environmental, economic, social and energy consequences*
17 *anticipated as a result of the proposed facility have been identified and*
18 *adverse impacts will be mitigated in accordance with rules of the council*
19 *applicable to the siting of the proposed facility; and*

20 (C) *The proposed facility is compatible with other adjacent uses or will be made*
21 *compatible through measures designed to reduce adverse impacts.*

22 **Reasons Supporting an Exception**

23 The state policy embodied in Goal 3 is the preservation and maintenance of
24 agricultural land for farm use. The energy facility would have limited impact on farm use. In
25 the *Final Order on the Application*, the Council found that the LJIIA components (principal
26 use and access roads) would occupy less than one percent of the EFU land adjacent to the
27 facility (the area within the lease boundary for LJIIA).¹²⁴ The Council’s finding was based on
28 the maximum area that these components were expected to occupy (approximately 63 acres),
29 but in the final design configuration, the LJIIA components are now expected to occupy
30 approximately 39 acres, as shown in Table 6 herein. As shown in Table 4, the LJIIB principal
31 use and access roads would occupy up to 69 acres of the LJIIB area (less than one percent).¹²⁵
32 The combined area occupied by the LJIIA and LJIIB components would remain less than one
33 percent of the adjacent area within the site boundary, if Amendment #1 were approved. The
34 land that the LJIIA and LJIIB structures would occupy would not be in a single, contiguous
35 area within which no farming activities could occur. Rather, the spacing of turbines and
36 turbine strings would allow farm use to continue on most of the land currently used for

¹²² Table 3 shows the maximum area occupied by the principal use and access roads as anticipated in the site certificate application (approximately 63 acres). Based on the final design configuration, the LJIIA facility components are now expected to occupy approximately 39 acres, as shown in Table 6.

¹²³ If the new rules apply and the LJF were found not to comply with OAR 660-033-0130(37), discussed below at page 38, then the Council must make the same determination regarding a Goal 3 exception.

¹²⁴ *Final Order on the Application* (September 21, 2007), p. 49.

¹²⁵ The LJIIB area contains approximately 7,962 acres. See Table 7 herein.

1 farming. In the *Final Order on the Application*, the Council found that only 13 acres would be
2 occupied by the LJIIA turbine towers and O&M buildings and that approximately 79 percent
3 of the occupied LJIIA land would be occupied by new access roads or improvements to
4 existing roads. More than 95 percent of the LJIB land occupied by the energy facility would
5 be occupied by access roads.

6 Condition 41 requires the certificate holder to locate access roads to minimize
7 disturbance of farming practices. The condition also requires the certificate holder to place
8 turbines and transmission interconnection lines along the margins of cultivated areas to reduce
9 the potential for conflict with farm operations wherever feasible. The new access roads and
10 the improved existing roads would be available to the landowner for use in farm operations.

11 Further reasons that justify the use of agricultural land for the wind energy facility
12 include achieving other state policy objectives and making efficient use of existing
13 transmission infrastructure.

14 In the *Final Order on the Application*, the Council found that approval of the LJF
15 would further the state policy embodied in Goal 13 (Energy Conservation).¹²⁶ This remains
16 true with the addition of the LJIB components. Expansion of the site boundary as proposed in
17 this amendment request, would allow the certificate holder to restore the overall generating
18 capacity previously approved for the facility. The Guidelines for implementing Goal 13 direct
19 that land use planning utilize renewable energy sources, including wind, “whenever possible.”
20 Approval of the amendment would “optimize” the use of the wind resource.¹²⁷ The certificate
21 holder plans to use 2.1-MW Suzlon turbines in the LJIIA area. The turbine manufacturer’s
22 specifications require that these turbines be spaced a minimum of three rotor diameters apart
23 from each other. This spacing requirement, combined with other setback considerations,
24 reduces the number of turbines that can be placed in the LJIIA area to 43, as further explained
25 by the certificate holder:¹²⁸

26 The LJII turbines must not only have sufficient space between each other, but must also be
27 sufficiently distant from the wake of two existing projects (Rattlesnake Road Wind Farm and
28 Leaning Juniper I) that neighbor the site. This distance is greatest in the direction of prevailing
29 winds. Turbine wake effects, combined with County setbacks, environmental constraints,
30 topography, and constructability limitations, reduce the number of turbines that can be
31 optimally placed in the LJIIA area to approximately 43 turbines. The 43 Suzlon turbines are
32 located to generate sufficient energy in order to meet LJWP economic requirements. If all
33 facility turbines were placed in the LJIIA area, the cost per kilowatt-hour would increase
34 significantly, and the project would not be economically viable. Placing facilities in the LJIB
35 area optimizes the wind resource by producing more energy production for the same amount
36 of nameplate capacity.

37 In the *Final Order*, the Council found that the proposed location of the LJF provides
38 efficient access to BPA’s regional transmission system.¹²⁹ This remains true with the addition
39 of the LJIB components. A 6.1-mile transmission line would be used to interconnect the
40 facility with the regional power grid. The transmission line has been analyzed as a utility
41 facility necessary for public service and is subject to the provisions of ORS 215.275, which

¹²⁶ *Final Order on the Application* (September 21, 2007), p. 49.

¹²⁷ Request for Amendment #1, Section 1, p. 1.

¹²⁸ Response to RAI (table), pp. 15-16 (response to Request #9).

¹²⁹ *Final Order on the Application* (September 21, 2007), p. 49.

1 promote efficient transmission access by requiring conditions “to mitigate and minimize the
2 impacts of the proposed facility, if any, on surrounding lands devoted to farm use.”

3 Environmental, Economic, Social and Energy Consequences

4 The Council’s standards address the environmental consequences of the proposed
5 facility. In our discussion of each of the standards, we identify the potential adverse impacts
6 of the LJF, including the LJIIB components, and explain how those impacts would be
7 mitigated. We discuss impacts to soils at page 45; to protected areas at page 46; to scenic
8 resources at page 49; to threatened and endangered species at page 61; to wildlife habitat at
9 page 63; to ambient noise levels at page 79; to wetlands and other state jurisdictional waters at
10 page 86; and to groundwater at page 87. The facility would have no emissions that would
11 adversely affect air or water quality. Upon retirement of the LJF, the structures would be
12 removed and the land would be restored to a useful, non-hazardous condition (see discussion
13 of the Council’s Retirement and Financial Assurance Standard at page 12).

14 In the *Final Order on the Application*, the Council found that the LJF would have
15 beneficial economic consequences and no significant adverse economic consequences.¹³⁰ The
16 Council’s findings regarding economic consequences apply as well to the LJIIB components,
17 and those findings are incorporated herein by this reference.

18 The Council’s standards address the potential adverse social consequences of the LJF.
19 In our discussion of the standards herein, we explain how any adverse social consequences of
20 the facility would be mitigated. The proposed facility, including the LJIIB components, would
21 not cause any significant adverse impact on the ability of communities in the local area to
22 provide services such as housing, health care, schools, police and fire protection, water and
23 sewer, solid waste management, transportation and traffic safety (see discussion of the
24 Council’s Public Services Standard at page 77). The facility would avoid adverse impact to
25 historic, cultural and archaeological resources (see discussion at page 76). The proposed
26 facility would have no adverse impact on recreational opportunities in the local area (see
27 discussion at page 53). We address public safety issues related to the proposed facility at page
28 55 (Public Health and Safety Standards for Wind Energy Facilities), page 59 (Siting
29 Standards for Transmission Lines), page 75 (Structural Standard) and page 89 (Public Health
30 and Safety). During construction and operation of the facility, the certificate holder would
31 minimize the generation of solid waste and wastewater and would properly dispose or recycle
32 waste materials (see discussion at page 78).

33 The proposed amendment would reduce the authorized average electric generating
34 capacity of the facility from 93 MW to 92.1 MW. The energy consequences of the LJF would
35 not otherwise change if Amendment #1 were approved. The Council’s previous findings
36 regarding energy consequences apply as well to the facility with the LJIIB components.

37 Compatibility with Other Adjacent Uses

38 In the *Final Order on the Application*, the Council found that the land uses adjacent to
39 the LJF include farming and the operation of the region’s largest landfill.¹³¹ The Council
40 found that the LJF would have no adverse impact on operation of the landfill and that the LJF
41 would be compatible with farm uses on the adjacent lands. These findings apply as well to the

¹³⁰ *Final Order on the Application* (September 21, 2007), p. 50.

¹³¹ *Final Order on the Application* (September 21, 2007), p. 51.

1 facility with the LJIIB components. Farm uses adjacent to the LJIIB components are
2 cultivation of wheat and barley and cattle grazing.¹³² As discussed above at page 26 in
3 reference to GCZO 7.020(Q), the LJF, including the LJIIB components proposed in the
4 amendment request, would be compatible with farm uses on adjacent land.

5 **The New Rules**

6 OAR 660-033-0130(37) defines a “wind power generating facility” and provides
7 criteria for the approval of a wind power generating facility sited on farmland. The Council
8 finds that the LJF components fit entirely within the definition of “wind power generating
9 facility” in OAR 660-033-0130(37). The Council finds that the LJF meets the approval
10 criteria for a wind power generating facility, for the reasons discussed below.

11 OAR 660-033-0130(37)

12 *(37) For purposes of this rule a wind power generation facility includes, but is not*
13 *limited to, the following system components: all wind turbine towers and concrete*
14 *pads, permanent meteorological towers and wind measurement devices, electrical*
15 *cable collection systems connecting wind turbine towers with the relevant power*
16 *substation, new or expanded private roads (whether temporary or permanent)*
17 *constructed to serve the wind power generation facility, office and operation and*
18 *maintenance buildings, temporary lay-down areas and all other necessary*
19 *appurtenances. A proposal for a wind power generation facility shall be subject to*
20 *the following provisions:*

21 *(a) For high-value farmland soils described at ORS 195.300(10), the*
22 *governing body or its designate must find that all of the following are*
23 *satisfied:*

24 *(A) Reasonable alternatives have been considered to show that siting the*
25 *wind power generation facility or component thereof on high-value*
26 *farmland soils is necessary for the facility or component to function*
27 *properly or if a road system or turbine string must be placed on such soils*
28 *to achieve a reasonably direct route considering the following factors:*

29 *(i) Technical and engineering feasibility;*

30 *(ii) Availability of existing rights of way; and*

31 *(iii) The long term environmental, economic, social and energy*
32 *consequences of siting the facility or component on alternative sites, as*
33 *determined under OAR 660-033-0130(37)(a)(B).*

34 *(B) The long-term environmental, economic, social and energy*
35 *consequences resulting from the wind power generation facility or any*
36 *components thereof at the proposed site with measures designed to reduce*
37 *adverse impacts are not significantly more adverse than would typically*
38 *result from the same proposal being located on other agricultural lands*
39 *that do not include high-value farmland soils.*

¹³² Response to RAI (table), p. 14 (response to Request #8).

1 (C) Costs associated with any of the factors listed in OAR 660-033-
2 0130(37)(a)(A) may be considered, but costs alone may not be the only
3 consideration in determining that siting any component of a wind power
4 generation facility on high-value farmland soils is necessary.

5 (D) The owner of a wind power generation facility approved under OAR
6 660-033-0130(37)(a) shall be responsible for restoring, as nearly as
7 possible, to its former condition any agricultural land and associated
8 improvements that are damaged or otherwise disturbed by the siting,
9 maintenance, repair or reconstruction of the facility. Nothing in this
10 subsection shall prevent the owner of the facility from requiring a bond or
11 other security from a contractor or otherwise imposing on a contractor the
12 responsibility for restoration.

13 (E) The criteria of OAR 660-033-0130(37)(b) are satisfied.

14 (b) For arable lands, meaning lands that are cultivated or suitable for
15 cultivation, including high-value farmland soils described at ORS
16 195.300(10), the governing body or its designate must find that:

17 (A) The proposed wind power facility will not create unnecessary negative
18 impacts on agricultural operations conducted on the subject property.
19 Negative impacts could include, but are not limited to, the unnecessary
20 construction of roads, dividing a field or multiple fields in such a way that
21 creates small or isolated pieces of property that are more difficult to farm,
22 and placing wind farm components such as meteorological towers on lands
23 in a manner that could disrupt common and accepted farming practices;
24 and

25 (B) The presence of a proposed wind power facility will not result in
26 unnecessary soil erosion or loss that could limit agricultural productivity
27 on the subject property. This provision may be satisfied by the submittal
28 and county approval of a soil and erosion control plan prepared by an
29 adequately qualified individual, showing how unnecessary soil erosion will
30 be avoided or remedied and how topsoil will be stripped, stockpiled and
31 clearly marked. The approved plan shall be attached to the decision as a
32 condition of approval; and

33 (C) Construction or maintenance activities will not result in unnecessary
34 soil compaction that reduces the productivity of soil for crop production.
35 This provision may be satisfied by the submittal and county approval of a
36 plan prepared by an adequately qualified individual, showing how
37 unnecessary soil compaction will be avoided or remedied in a timely
38 manner through deep soil decompaction or other appropriate practices.
39 The approved plan shall be attached to the decision as a condition of
40 approval; and

41 (D) Construction or maintenance activities will not result in the unabated
42 introduction or spread of noxious weeds and other undesirable weeds
43 species. This provision may be satisfied by the submittal and county

1 *approval of a weed control plan prepared by an adequately qualified*
2 *individual that includes a long-term maintenance agreement. The approved*
3 *plan shall be attached to the decision as a condition of approval.*

4 (c) *For nonarable lands, meaning lands that are not suitable for cultivation,*
5 *the governing body or its designate must find that the requirements of OAR*
6 *660-033-0130(37)(b)(D) are satisfied.*

7 (d) *In the event that a wind power generation facility is proposed on a*
8 *combination of arable and nonarable lands as described in OAR 660-033-*
9 *0130(37)(b) and (c) the approval criteria of OAR 660-033-0130(37)(b)*
10 *shall apply to the entire project.*

11 OAR 660-033-0130(37)(a) provides criteria for locating a wind power generating
12 facility on high-value farmland soils. The rule references ORS 195.300(10) for the definition
13 of “high-value farmland soils.” ORS 195.300(10), in turn, references ORS 215.710, which
14 defines “high value farmland.” The definition of “high value farmland” has been discussed
15 above at page 22. In the *Final Order on the Application*, the Council found that the LJIIA
16 components would not occupy high-value farmland.¹³³ As shown in Table 4 on page 23, the
17 LJIIB components would occupy a maximum of 24.15 acres of high-value farmland.¹³⁴

18 Reasonable Alternatives

19 OAR 660-033-0130(37)(a)(A) requires the certificate holder to consider “reasonable
20 alternatives” to locating the facility, or components of the facility, on high-value farmland.
21 The certificate holder must “show that siting the wind power generation facility or component
22 thereof on high-value farmland soils is necessary for the facility or component to function
23 properly.” In the case of access roads and turbine strings, the certificate holder must show that
24 these components must be placed on high-value farmland soils “to achieve a reasonably direct
25 route.” To demonstrate the necessity of using high-value farmland for the facility to “function
26 properly” or for a road or turbine string to “achieve a reasonably direct route,” the certificate
27 holder must consider the factors listed in subsections (i) through (iii).

28 The rule first requires the certificate holder to determine whether “reasonable
29 alternatives” exist on soils that are not “high-value farmland soils.” The certificate holder
30 must then analyze whether the facility could “function properly” and whether turbine string
31 and roads could “achieve a reasonably direct route” in an alternative location. The rule does
32 not, however, contain specific factors to be considered to determine whether a given
33 alternative is “reasonable.” The certificate holder addressed these questions in the Request for
34 Amendment #1 and concluded that “siting the proposed LJIIB components partially on high-
35 value farmland soils is necessary for the facility to function properly” and for the road system
36 and turbine strings to achieve a reasonably direct route.¹³⁵

37 The certificate holder proposes to add the LJIIB area to the LJF because of turbine
38 spacing requirements and potential wake interference from neighboring wind energy facilities

¹³³ *Final Order on the Application* (September 21, 2007), p. 29.

¹³⁴ This total includes the principal use and the access roads. Although the 230-kV transmission line and the LJIIB substation represent the interconnection option with the greatest area of land use, this option would not occupy any high-value farmland.

¹³⁵ Request for Amendment #1, Section 4, pp. 22-23.

1 that make it no longer possible for the facility to achieve its previously-approved generating
2 capacity if it were confined to the LJIIA area. The certificate holder plans to use 2.1-MW
3 Suzlon turbines in the LJIIA area. The certificate holder has determined that “turbine wake
4 effects, combined with County setbacks, environmental constraints, topography, and
5 constructability limitations, reduce the number of turbines that can be optimally placed in the
6 LJIIA area to approximately 43 turbines.”¹³⁶ Confining the facility to the LJIIA area would,
7 therefore, reduce the peak generating capacity of the facility to 90.3 MW from the previously-
8 approved capacity of up to 279 MW. For this reason, the Council finds that building the
9 facility within the LJIIA area is not a reasonable alternative.

10 To carry out the state land use policy embodied in Goal 13 (Energy Conservation), the
11 Council finds that a “reasonable alternative” under OAR 660-033-0130(37)(a)(A) must enable
12 the wind facility to make efficient use of a comparable wind resource, compared to the
13 proposed location that affects high-value farmland soils. The Planning Guidelines for Goal
14 13, provide that “priority consideration in land use planning should be given to methods of
15 analysis and implementation measures that will assure achievement of maximum efficiency in
16 energy utilization” and “the allocation of land and uses permitted on the land should seek to
17 minimize the depletion of non-renewable sources of energy.” The Guidelines direct that land
18 conservation and development actions should “utilize renewable energy sources,” including
19 wind, “whenever possible.” The Council finds an alternative location or configuration of a
20 proposed wind power generation facility on land that does not contain high-value farmland
21 soils is a “reasonable” alternative under OAR 660-033-0130(37)(a)(A) only if the alternative
22 location has a substantially similar wind resource compared to the configuration that would
23 affect high value farmland soils.

24 The Council finds an alternative location or configuration of a proposed wind power
25 generation facility on land that does not contain high-value farmland soils is not a
26 “reasonable” alternative under OAR 660-033-0130(37)(a)(A) if the location or configuration
27 would significantly increase the area within the site boundary, significantly increase the area
28 permanently occupied by the facility’s components or significantly increase the length of
29 aboveground transmission lines that are necessary to connect the wind facility to the regional
30 power grid.

31 A large area is necessary to enable micrositing of the final configuration of the LJIIIB
32 components. The LJIIIB site boundary would contain approximately 7,962 acres, although the
33 proposed facility would have a permanent footprint of approximately 72 acres (including
34 approximately 24 acres of high-value farmland soils). Micrositing involves a wide range of
35 considerations, among which are the following:

- 36 • Efficient utilization of the wind resource.
- 37 • Ensuring that each wind turbine is located a sufficient distance from other wind
38 turbines to make efficient use of the available wind resource while minimizing
39 “wake” effects.
- 40 • Ensuring compatibility with farm operations.
- 41 • Avoiding impact to valuable wildlife habitat.
- 42 • Ensuring adequate wind turbine safety setbacks from residences and public
43 roads.

¹³⁶ Response to RAI (table), pp. 15-16 (response to Request #9).

- 1 • Locating turbines a sufficient distance from residences to ensure compliance with
- 2 noise control regulations.
- 3 • Reducing the length of the facility’s aboveground transmission lines.
- 4 • Reducing the area occupied by the facility’s access roads.

5 The Council finds that an alternative location is “reasonable” only if it is available.
6 Because a large area is needed for micrositing, an alternative location is available only where
7 the developer can lease enough contiguous parcels of property to ensure a sufficient area. The
8 commitment of a sufficient number of neighboring property owners is needed before the
9 developer can determine if enough land is available in an alternative location for the project as
10 a whole to be viable, yet without a definite prospect of lease income, landowners may be
11 unwilling to make that commitment. Some landowners may be negotiating simultaneously
12 with more than one wind developer.

13 In addition, whether an alternative location is “reasonable” may depend on the
14 location of a previous construction phase. In this case, the proposed LJIB components are an
15 expansion of a wind power facility that received land use approval before the new rules were
16 adopted by LCDC. The proposed LJIB components would expand the boundaries of that
17 facility. It would be unreasonable to require a certificate holder to locate a facility expansion
18 at a distant location remote from facility components that have already been approved for
19 construction. The Council finds that, for an amendment that enlarges the site of an existing
20 facility, a “reasonable alternative” must be either contiguous with, or sufficiently close to, the
21 previously-approved components to ensure that operation of the entire facility is practicable.

22 Figures 12 and 13 in the amendment request show a mosaic of soil types in which
23 high-value farmland soils are interspersed with non-high-value farmland.¹³⁷ Based on these
24 figures, the certificate holder observes that “there are few areas in which high-value farmland
25 soils will not be affected to some extent and still meet the project needs.”¹³⁸ The figures also
26 demonstrate that there are no large, contiguous areas of non-high-value farmland that are of
27 sufficient size to locate the proposed LJIB components close to the previously-approved
28 LJIA components and close to the BPA transmission facilities.¹³⁹ Because the areas of non-
29 high-value farmland are interspersed with high-value farmland soils, proposed turbine strings
30 (including access roads and collector lines) cannot be located to “achieve a reasonably direct
31 route” without affecting high-value-farmland soils. The Council finds that the certificate
32 holder has considered reasonable alternatives and has shown that siting the wind power
33 generation facility or component thereof on high-value farmland soils is necessary as required
34 under OAR 660-033-0130(37)(a)(A).

35 Environmental, Economic, Social and Energy Consequences

36 Under OAR 660-033-0130(37)(a)(B), the certificate holder must show that “the long
37 term environmental, economic, social and energy consequences” of the facility or its
38 components, taking mitigation into account, “are not significantly more adverse than would
39 typically result from the same proposal being located on other agricultural lands that do not

¹³⁷ Request for Amendment #1, Section 4, p. 22, and Attachment 1, Figures 12 and 13.

¹³⁸ Request for Amendment #1, Section 4, p. 22.

¹³⁹ Much of the area to the north and east of the LJIA area is already occupied by existing or approved wind energy facilities, including Leaning Juniper I, Pebble Springs, Rattlesnake Road, Wheatfield and Shepherds Flat Wind Farm.

1 include high-value farmland soils.” The test is similar to that required under ORS
2 459.504(2)(c)(B) when the Council determines whether to grant a “reasons” exception to a
3 statewide planning goal: “The significant environmental, economic, social and energy
4 consequences anticipated as a result of the proposed facility have been identified and adverse
5 impacts will be mitigated in accordance with rules of the council applicable to the siting of the
6 proposed facility.” The environmental, economic, social and energy consequences of the LJF
7 are discussed at page 37 as part of the Goal 3 exception analysis. For the reasons addressed
8 there, the Council finds that the “consequences” of siting the facility on high-value farmland
9 are not significantly more adverse than would typically result from locating the components
10 on non-high-value farmland. Site certificate conditions contain mitigation measures that
11 would minimize any adverse impacts from siting the LJF on high-value farmland. Although
12 the facility components might affect some agricultural routines of the landowner, the wind
13 turbines will provide a significant source of additional, stable income to the landowner.

14 Rigid avoidance of creating any impact on any high-value farmland in Gilliam County
15 could have the opposite effect; that is, siting wind energy facilities *only* on non-high-value
16 agricultural lands may have “long term environmental, economic, social and energy
17 consequences” that are significantly *more adverse* than would result from allowing some
18 components of a wind energy facility to occupy high-value-farmland soils. To avoid all areas
19 of high-value farmland soil in locations characterized by pockets of high-value soils
20 interspersed with non-high-value soils, the footprint of a wind energy facility would have to
21 stretch over a larger micrositing area to achieve the same overall generating capacity,
22 resulting in greater potential environmental and farm use impact and reduced efficiency.

23 Costs

24 OAR 660-033-0130(37)(a)(C) provides that costs may be considered in the analysis
25 but “may not be the only consideration in determining that siting any component of a wind
26 power generation facility on high-value farmland soils is necessary.” Considerations other
27 than cost have been discussed above.

28 Restoration

29 OAR 660-033-0130(37)(a)(D) requires the owner of a wind facility to restore
30 agricultural land damaged by the wind power facility. Condition 74 requires the certificate
31 holder to restore all areas disturbed by construction, including farmland, according to the
32 requirements of the *Revegetation Plan*. The Council finds that the requirements of Condition
33 74 ensure compliance with OAR 660-033-0130(37)(a)(D).

34 Additional Criteria

35 OAR 660-033-0130(37)(a)(E) requires the certificate holder to demonstrate that the
36 criteria of OAR 660-033-0130(37)(b) are satisfied when determining whether a facility may
37 be sited on high-value farmland soils.

38 Arable and Nonarable Lands

39 Subsections (b), (c) and (d) of OAR 660-033-0130(37) provide additional criteria for
40 wind power generation facilities located on “arable” or “nonarable” land. Subsection (b)
41 defines “arable land” as “lands that are cultivated or suitable for cultivation, including high-
42 value farmland soils,” and provides criteria for locating a facility on arable land. Subsection
43 (c) defines “nonarable land” as land “not suitable for cultivation” and identifies the criteria

1 applicable on nonarable land. Subsection (d) provides that when a proposed wind power
2 generation facility is located on a combination of arable and nonarable lands, then the criteria
3 in subsection (b) apply to the entire facility. The LJF, including the proposed LJIIB
4 components, would be located on combination of arable and nonarable lands, as shown in
5 Table 7 herein. Accordingly, the criteria in subsection (b) apply to the entire facility.

6 Impacts on Agricultural Operations

7 OAR 660-033-0130(37)(b)(A) provides that the proposed wind power facility must
8 not “create unnecessary negative impacts on agricultural operations conducted on the subject
9 property.” This requirement is substantially equivalent to the approval standards in the
10 Gilliam County zoning ordinance, GCZO Section 7.020(Q), discussed above at page 26. For
11 the reasons discussed there, the Council finds that the LJF, including the proposed LJIIB
12 components, will not result in unnecessary negative impacts on agricultural operations.

13 Soil Erosion and Compaction

14 OAR 660-033-0130(37)(b)(B) provides that the proposed wind power facility must
15 not result in unnecessary soil erosion or loss that could limit agricultural productivity. OAR
16 660-033-0130(37)(b)(C) provides that facility construction or maintenance activities must not
17 result in unnecessary soil compaction that reduces the productivity of soil for crop production.
18 Potential adverse impacts to soils and measures to avoid or control soil erosion and
19 compaction are addressed by the Council’s Soil Protection Standard, discussed below at page
20 45. For the reasons discussed there, the Council finds that construction and operation of the
21 LJF, including the proposed LJIIB components, would not result in unnecessary soil erosion,
22 soil loss or soil compaction that reduces the productivity of soil for crop production.

23 Site certificate conditions address soil erosion and compaction. Condition 70 requires
24 that construction be conducted in compliance with an Erosion and Sediment Control Plan.
25 Construction truck traffic would be limited to existing and improved road surfaces to avoid
26 soil compaction (Condition 71). The certificate holder would comply with the requirements of
27 the *Revegetation Plan* incorporated under Condition 74, which includes restoration of
28 cropland in consultation with the landowner or farm operator.

29 Weed Control

30 OAR 660-033-0130(37)(b)(D) provides that construction or maintenance activities
31 must not result in the “unabated introduction or spread of noxious weeds and other
32 undesirable weeds species.” Condition 74 addresses construction impacts to agricultural land
33 and requires the certificate holder to implement the *Revegetation Plan*, which includes weed
34 control measures. Condition 82 requires the certificate holder to develop a weed control plan
35 in consultation with the Gilliam County Weed Control Board and to implement the plan
36 during construction and operation of the facility. The Council finds that construction and
37 operation of the LJF, including the proposed LJIIB components, would not result in unabated
38 introduction or spread of weeds on farmland.

Conclusions of Law

39 Based on the findings of fact, reasoning, proposed conditions and conclusions
40 discussed above, the Council finds that the LJF, including the proposed LJIIB components,
41 would comply with all applicable substantive criteria from Gilliam County except GCZO

1 Section 4.020(D)(14). Accordingly, the Council must proceed with the land use analysis
2 under ORS 469.504(1)(b)(B).

3 If the new LCDC rules apply, the Council finds that the proposed expansion of the
4 LJF complies with OAR 660-033-0130(37) and otherwise complies with all applicable
5 statewide planning goals.¹⁴⁰ If the old LCDC rules apply, the Council finds that the proposed
6 expansion of the LJF does not comply with OAR 660-033-0130(17) and (22) and therefore
7 does not comply with the applicable statewide planning goal (Goal 3). The Council finds that
8 an exception to Goal 3 is justified under ORS 469.504(2)(c).

9 Based on these findings and the site certificate conditions described herein, the
10 Council concludes that the LJF would comply with the Land Use Standard if Amendment #1
11 were approved.

(b) Soil Protection

OAR 345-022-0022

12 *To issue a site certificate, the Council must find that the design, construction and*
13 *operation of the facility, taking into account mitigation, are not likely to result in a*
14 *significant adverse impact to soils including, but not limited to, erosion and*
15 *chemical factors such as salt deposition from cooling towers, land application of*
16 *liquid effluent, and chemical spills.*
17

Findings of Fact

18 In the *Final Order on the Application*, the Council found that the design, construction
19 and operation of the LJF would not likely cause a significant adverse impact to soils.¹⁴¹
20 Amendment #1 would enlarge the site boundary of the LJF. The Council must decide whether
21 the design, construction and operation of the proposed LJIIB components would have a
22 significant adverse impact to soils.

23 Adverse impacts to soils can affect crop production on adjacent agricultural lands,
24 native vegetation, fish and wildlife habitat and water quality. Construction and operation of
25 the LJIIB components could have soil impacts such as erosion, compaction and chemical
26 spills. Because a wind facility does not have a cooling tower or liquid effluent, there is no
27 potential for salt deposition or land application of liquid effluent. Small amounts of lubricant
28 and herbicide for weed control would be used, but due to the quantities used, there is no
29 potential for significant spills.

30 In the Request for Amendment #1, the certificate holder discussed the potential soil
31 impacts and provided information about the soil types in the LJIIB area.¹⁴² In the *Final Order*
32 *on the Application*, the Council made findings about the potential soil impacts resulting from
33 construction and operation of the LJF and adopted Conditions 60, 70, 71, 74, 75 and 77 to
34 mitigate potential impacts. The construction and operation of the LJIIB components would
35 involve the same types of potential soil impacts, and the findings in the *Final Order* apply as
36 well to the LJIIB components. The Council finds that the design, construction and operation

¹⁴⁰ If the new rules apply and the LJF were found not to comply with OAR 660-033-0130(37), then an exception to Goal 3 would be justified for the reasons discussed herein.

¹⁴¹ *Final Order on the Application* (September 21, 2007), p. 53.

¹⁴² Request for Amendment #1, Section 4, pp. 15-16, and Attachment 4.

1 of the LJF including the proposed LJIB components would not likely result in significant
2 adverse impact to soils, taking into account the mitigation required by the site certificate
3 conditions.

Conclusions of Law

4 For the reasons discussed above, the Council concludes that the LJF would comply
5 with the Council’s Soil Protection Standard if Amendment #1 were approved.

(c) Protected Areas

OAR 345-022-0040

6 *(1) Except as provided in sections (2) and (3), the Council shall not issue a site*
7 *certificate for a proposed facility located in the areas listed below. To issue a site*
8 *certificate for a proposed facility located outside the areas listed below, the*
9 *Council must find that, taking into account mitigation, the design, construction*
10 *and operation of the facility are not likely to result in significant adverse impact to*
11 *the areas listed below. References in this rule to protected areas designated under*
12 *federal or state statutes or regulations are to the designations in effect as of May*
13 *11, 2007:*
14

15 *(a) National parks, including but not limited to Crater Lake National Park and*
16 *Fort Clatsop National Memorial;*

17 *(b) National monuments, including but not limited to John Day Fossil Bed*
18 *National Monument, Newberry National Volcanic Monument and Oregon Caves*
19 *National Monument;*

20 *(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C.*
21 *1131 et seq. and areas recommended for designation as wilderness areas pursuant*
22 *to 43 U.S.C. 1782;*

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

28 *(e) National coordination areas, including but not limited to Government*
29 *Island, Ochoco and Summer Lake;*

30 *(f) National and state fish hatcheries, including but not limited to Eagle Creek*
31 *and Warm Springs;*

32 *(g) National recreation and scenic areas, including but not limited to Oregon*
33 *Dunes National Recreation Area, Hell’s Canyon National Recreation Area, and*
34 *the Oregon Cascades Recreation Area, and Columbia River Gorge National*
35 *Scenic Area;*

36 *(h) State parks and waysides as listed by the Oregon Department of Parks and*
37 *Recreation and the Willamette River Greenway;*

1 (i) *State natural heritage areas listed in the Oregon Register of Natural*
2 *Heritage Areas pursuant to ORS 273.581;*

3 (j) *State estuarine sanctuaries, including but not limited to South Slough*
4 *Estuarine Sanctuary, OAR Chapter 142;*

5 (k) *Scenic waterways designated pursuant to ORS 390.826, wild or scenic*
6 *rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and*
7 *rivers listed as potentials for designation;*

8 (L) *Experimental areas established by the Rangeland Resources Program,*
9 *College of Agriculture, Oregon State University: the Prineville site, the Burns*
10 *(Squaw Butte) site, the Starkey site and the Union site;*

11 (m) *Agricultural experimental stations established by the College of*
12 *Agriculture, Oregon State University, including but not limited to:*

13 *Coastal Oregon Marine Experiment Station, Astoria*

14 *Mid-Columbia Agriculture Research and Extension Center, Hood River*

15 *Agriculture Research and Extension Center, Hermiston*

16 *Columbia Basin Agriculture Research Center, Pendleton*

17 *Columbia Basin Agriculture Research Center, Moro*

18 *North Willamette Research and Extension Center, Aurora*

19 *East Oregon Agriculture Research Center, Union*

20 *Malheur Experiment Station, Ontario*

21 *Eastern Oregon Agriculture Research Center, Burns*

22 *Eastern Oregon Agriculture Research Center, Squaw Butte*

23 *Central Oregon Experiment Station, Madras*

24 *Central Oregon Experiment Station, Powell Butte*

25 *Central Oregon Experiment Station, Redmond*

26 *Central Station, Corvallis*

27 *Coastal Oregon Marine Experiment Station, Newport*

28 *Southern Oregon Experiment Station, Medford*

29 *Klamath Experiment Station, Klamath Falls;*

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

34 (o) *Bureau of Land Management areas of critical environmental concern,*
35 *outstanding natural areas and research natural areas;*

1 (p) State wildlife areas and management areas identified in OAR chapter
2 635, Division 8.

3 * * *

4 Findings of Fact

5 In the *Final Order on the Application*, the Council found that the design, construction
6 and operation of the LJF would not likely result in significant adverse impact to protected
7 areas.¹⁴³ The Council identified the John Day River Wildlife Refuge, the John Day Federal
8 Wild and Scenic River, the John Day State Scenic Waterway and the Horn Butte Area of
9 Critical Environmental Concern (ACEC) as the protected areas within the analysis area for the
10 LJF. Amendment #1 would change the site boundary of the LJF and authorize the
11 construction of wind turbines, transmission lines and other visible structures in the LJIB area.
12 The Council must decide whether the design, construction and operation of the proposed
LJIB components would have a significant adverse impact to protected areas.

13 The certificate holder conducted an analysis within the expanded analysis area
14 extending 20 miles from the proposed amended site boundary for LJIA and LJIB. No
15 protected areas lie within the proposed LJIB area, and there are no protected areas within the
16 expanded analysis area other than the four areas identified by the Council in the *Final Order*.
17 The amendment request includes Zone of Visual Influence (ZVI) maps for the analysis
18 area.¹⁴⁴ Figure 14 (based on the maximum turbine layout) and Figure 15 (based on the
19 minimum turbine layout) show the areas from which LJIA and LJIB wind turbines could be
20 visible. The maps show the identified protected areas within the analysis area.

21 The nearest LJIA or LJIB turbines would be approximately six miles away from the
22 segments of the John Day River that have been designated as Federal Wild and Scenic River
23 and State Scenic Waterway. The ZVI maps show that the LJF turbines would not be visible
24 from viewpoints on the river. Portions of the John Day Wildlife Refuge are approximately 6
25 miles from the nearest LJIA or LJIB turbine. The refuge is protected for wildlife habitat and
26 is not managed for scenic views. In the *Final Order on the Application*, the Council found
27 that some LJF turbines might be visible from a small and relatively inaccessible area within
28 the wildlife refuge approximately ¼-mile from the river bank.¹⁴⁵

29 The ZVI maps show that LJIA and LJIB turbines would be visible from the Horn
30 Butte ACEC at a distance of at least three miles. This protected area is managed for wildlife
31 and wildlife habitat and not for scenic quality. In addition, the certificate holder noted that
32 views from the majority of the Horn Butte ACEC currently include wind turbines, various
33 transmission lines, highways, roads and other structures.¹⁴⁶

¹⁴³ *Final Order on the Application* (September 21, 2007), p. 57.

¹⁴⁴ Request for Amendment #1, Attachment 1, Figures 14 and 15. ZVI analysis is a modeling analysis of line-of-sight visibility. The model does not take into account screening from vegetation or structures that might be present between a viewpoint and the site or factors such as weather conditions, haze or background landscape that might obscure the visual effect. The analysis considers a turbine or other structure to be “visible” if any part of a turbine is within a line-of-sight, based on the maximum blade tip height.

¹⁴⁵ *Final Order on the Application* (September 21, 2007), p. 57.

¹⁴⁶ Request for Amendment #1, Section 4, p. 29.

1 In the *Final Order on the Application*, the Council made findings regarding the
2 potential noise generated by construction and operation of the LJF.¹⁴⁷ These findings apply as
3 well to the noise that would be generated by the construction and operation of the LJIIB
4 components. Analysis of the potential noise generated by operation of the LJIIB components
5 is discussed herein at page 79.

6 In the *Final Order on the Application*, the Council made findings regarding the
7 potential impacts of traffic, water use and wastewater disposal.¹⁴⁸ Approval of the amendment
8 request would not significantly increase traffic volume on affected roads during construction
9 or operation of the facility.¹⁴⁹ The greatest use of water occurs during construction. The need
10 for water is directly related to the number of turbine foundations being built (water used for
11 mixing concrete) and to the duration of construction activities (water used for dust
12 suppression). The proposed expansion of the LJF would reduce the maximum number of wind
13 turbines at the facility from 133 to 127, reducing the number of turbine foundations to be built
14 and possibly reducing the duration of construction activities compared to what would have
15 occurred during construction of the facility without the LJIIB components.¹⁵⁰

16 The Council finds the previous findings in the *Final Order on the Application*
17 regarding potential impacts on protected areas apply as well to the LJIIB components. The
18 Council finds that no part of the LJF, including the proposed LJIIB components, is located in
19 any protected area listed in OAR 345-022-0040 and that the design, construction and
20 operation of the LJF are not likely to result in significant adverse impact to any protected area.

Conclusions of Law

21 For the reasons discussed above, the Council concludes that the LJF would comply
22 with the Council's Protected Areas Standard if Amendment #1 were approved.

(d) Scenic Resources

OAR 345-022-0080

23 (1) *Except for facilities described in section (2), to issue a site certificate, the*
24 *Council must find that the design, construction and operation of the facility, taking*
25 *into account mitigation, are not likely to result in significant adverse impact to*
26 *scenic resources and values identified as significant or important in local land use*
27 *plans, tribal land management plans and federal land management plans for any*
28 *lands located within the analysis area described in the project order.*
29

30 * * *

Findings of Fact

31 In the *Final Order on the Application*, the Council found that the design, construction
32 and operation of the LJF were not likely to result in a significant adverse impact to scenic and
33 aesthetic values identified as significant or important in applicable federal land management
34 plans or in local land use plans in the analysis area.¹⁵¹ In making these findings, the Council

¹⁴⁷ *Final Order on the Application* (September 21, 2007), p. 55.

¹⁴⁸ *Final Order on the Application* (September 21, 2007), pp. 55-56.

¹⁴⁹ Request for Amendment #1, Section 4, p. 48.

¹⁵⁰ Water use during construction is addressed in the Request for Amendment #1 at pages 46-47, and in Response to RAI, Summary of Modifications, p. 2, and Attachment 4.

¹⁵¹ *Final Order on the Application* (September 21, 2007), p. 64.

1 addressed an analysis area that included the area within the LJIA site boundary and within 30
2 miles from the site boundary. Amendment #1 would change the site boundary of the LJV and
3 authorize the construction of wind turbines and other visible structures in the LJIB area. The
4 Council must decide whether the design, construction and operation of the proposed LJIB
5 components would have a significant adverse impact to significant or important scenic
6 resources.

7 In the amendment request, the certificate holder analyzed the area within the site
8 boundary and 10 miles from the site boundary.¹⁵² The Council finds that the analysis area for
9 the purposes of this amendment request is the area within the site boundary and 10 miles from
10 the site boundary, in conformance with the current “study area” definition in OAR 345-001-
11 0010 and the requirement stated in OAR 345-027-0070(10) that the Council apply
12 administrative rules in effect on the date the Council makes its decision.¹⁵³

13 The Council has previously found that the significant visual features of the LJIA
14 components included up to 133 turbines, 22 miles of new access roads, one or two O&M
15 buildings, a substation, four meteorological towers, up to 9.9 miles of aboveground collector
16 lines and a 400-foot 230-kV transmission interconnection line.¹⁵⁴ The proposed amendment
17 would reduce the maximum number of turbines to 127, but would reconfigure the location of
18 the turbines such that up to 84 turbines would be located in the LJIB area. The certificate
19 holder plans to build 43 turbines in the LJIA area (compared to 133 turbines previously
20 authorized in the same area). The proposed amendment would authorize construction of up to
21 20.9 miles of new access roads in the LJIB area. The proposed amendment would not
22 increase the number of O&M buildings but would authorize the option of building an
23 additional substation in the LJIB area. The proposed amendment would increase the
24 maximum length of aboveground collector line from 9.9 miles to 16.6 miles and would
25 authorize the construction of an aboveground 34.5-kV or 230-kV interconnection line
26 approximately 6.1 miles long running between the LJIB area and the LJIA substation.

27 The certificate holder identified federally-managed and locally-managed areas within
28 the analysis area from which one or more LJV wind turbines would be visible.¹⁵⁵ These
29 management areas are listed in Table 5. The amendment request includes ZVI maps that
30 illustrate the visibility of LJV wind turbines and the LJIB interconnection line (assuming a
31 230-kV line is built), based on the ZVI analysis.¹⁵⁶ Figure 16 depicts the visibility of the
32 maximum turbine layout, and Figure 17 depicts visibility of the minimum turbine layout.
33 Figure 18 depicts the visibility of LJIB transmission line structures if the preferred
34 transmission line route is used, and Figure 19 depicts the visibility of LJIB transmission line
35 structures if the alternative transmission line route is used.

¹⁵² Request for Amendment #1, Section 4, pp. 35-41.

¹⁵³ Under OAR 345-001-0010(2), the analysis area is the “study area” unless modified by the Project Order. At the time the First Amended Project Order was issued (November 21, 2006), the “study area” for scenic resources as defined under OAR 345-001-0010 included the area within 30 miles from the site boundary. The project order did not modify this definition in describing the analysis area for the LJV application. There has been no subsequent amendment of the project order.

¹⁵⁴ *Final Order on the Application* (September 21, 2007), p. 58.

¹⁵⁵ Request for Amendment #1, Section 4, p. 38.

¹⁵⁶ Request for Amendment #1, Attachment 1, Figures 16-19.

Table 5: Land Management Areas

Area	Management	Location	Distance to nearest LJF turbine (miles)
John Day River	Federal/State	Oregon	6
Oregon National Historic Trail	Federal	Oregon	< 0.1
Gilliam County	County	Oregon	0
Sherman County	County	Oregon	6
Morrow County	County	Oregon	6
Klickitat County	County	Washington	2
City of Arlington	City	Oregon	1

1 John Day River

2 In the *Final Order on the Application*, the Council made findings regarding the
3 identified scenic resources associated with the federal and state managed segments of the John
4 Day River.¹⁵⁷ The Council found that, although portions of the facility might be visible from
5 vantage points at higher elevation along the canyon walls of the John Day, the nearest wind
6 turbines would be at least six miles away and the presence of wind turbines six miles or more
7 away from the river would not interfere with views of the protected scenic values. Approval
8 of Amendment #1 would not change the facts or circumstances upon which the Council relied
9 in making these findings.

10 Oregon National Historic Trail

11 Under the National Trails System Act, “high potential historic sites” are historic sites
12 that provide an opportunity to interpret the historic significance of the trail. Criteria for
13 selection of a high potential historic site include “historic significance, presence of visible
14 historic remnants, scenic quality, and relative freedom from intrusion.” The Act defines “high
15 potential route segments” as segments of a trail that “afford high quality recreation experience
16 in a portion of the route having greater than average scenic values or affording an opportunity
17 to vicariously share the experience of the original users of a historic route.”¹⁵⁸ The certificate
18 holder identified two “high potential historic sites” in the analysis area that are associated
19 with the Oregon National Historic Trail (ONHT): Fourmile Canyon and the John Day River
20 Crossing (McDonald Ford).¹⁵⁹ Based on the ZVI analysis, LJF turbines and LJIIB
21 transmission line structures would not be visible from the John Day River Crossing historic
22 site.

23 The Fourmile Canyon historic site is located approximately three miles from the
24 nearest proposed LJIIB turbine location (the LJIIA turbine locations are farther away). In the
25 *Final Order on the Application*, the Council found that the Fourmile Canyon site is protected
26 primarily for the historic significance of deep wagon ruts visible where the trail crossed
27 Fourmile Canyon.¹⁶⁰ An interpretive wayside is located within the canyon itself where the

¹⁵⁷ *Final Order on the Application* (September 21, 2007), pp. 60-61.

¹⁵⁸ 16 USC 1251.

¹⁵⁹ Request for Amendment #1, Section 4, p. 39.

¹⁶⁰ *Final Order on the Application* (September 21, 2007), p. 61.

1 topography would likely block the line-of-sight to LJF turbines. The Council made additional
2 findings about the Oregon National Historic Trail and the Fourmile Canyon historic site in the
3 *Final Order on the Application for the Shepherds Flat Wind Farm*, and those findings are
4 incorporated herein by this reference.¹⁶¹ The management plan prepared for the site by the
5 BLM Prineville District describes “visible, well defined ruts representing a segment of the
6 Trail where immigrants were ‘passing through’ on their way to the next campsite.”¹⁶² The
7 BLM has erected an ONHT interpretive wayside on Fourmile Canyon Road. Visitors to the
8 BLM interpretive wayside look in a southwest direction to observe the visible ruts of the
9 ONHT on the hillside approximately 100 meters away. The Council found that the important
10 scenic value associated with the ONHT at the Fourmile Canyon site is the view of the visible
11 remnants of the Oregon Trail and the immediate surroundings on public land.¹⁶³ Based on the
12 ZVI analysis in the amendment request, it is unlikely that LJF turbines or other structures
13 would be visible from the BLM wayside in Fourmile Canyon. The Council finds that LJF,
14 including the LJIIB components, is not likely to result in significant adverse impact to the
15 scenic values associated with the Fourmile Canyon historic site.

16 Gilliam County

17 In the *Final Order on the Application*, the Council found that the scenic resources
18 identified in the Gilliam County Comprehensive Plan are “rock outcroppings” and the John
19 Day River scenic corridor.¹⁶⁴ The Council found that the LJF would not have a significant
20 adverse effect on these scenic resources. Approval of Amendment #1 would not change the
21 facts or circumstances upon which the Council relied in making these findings.

22 Sherman County

23 The LJF, including the proposed LJIIB components, is at least six miles from the
24 nearest locations in Sherman County. In the *Final Order on the Application*, the Council
25 found that the scenic resources identified in the Sherman County Comprehensive Plan are
26 trees, rock outcroppings, the John Day River Canyon, the Deschutes River Canyon and the
27 Journey Through Time Tour Route (a Scenic Byway managed by the Oregon Department of
28 Transportation (ODOT)).¹⁶⁵ The potential impacts of the LJF on the John Day River scenic
29 areas have been described above. The LJF would not require removal of any trees in Sherman
30 County and would not interfere with views of rock outcroppings. The nearest parts of
31 Deschutes River Canyon and the Journey Through Time Tour Route (U.S. Highway 97) are
32 more than 18 miles from the LJF. Although there are scenic areas along Highway 97, the
33 Journey Through Time Tour Route Management Plan does not identify any significant or
34 important scenic resources in the segments of the highway closest to the LJF site boundary.¹⁶⁶
35 The Council finds that the LJF, including the LJIIB components, would not result in a
36 significant adverse impact to the scenic resources identified in the Sherman County land use
37 plan.

¹⁶¹ *Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), pp. 71-74.

¹⁶² *Oregon Trail Management Plan*, Bureau of Land Management, Prineville District, September 1993, p. 3.

¹⁶³ *Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), p. 74.

¹⁶⁴ *Final Order on the Application* (September 21, 2007), pp. 66-67.

¹⁶⁵ *Final Order on the Application* (September 21, 2007), pp. 62-63.

¹⁶⁶ *Journey Through Time Tour Route Management Plan* (April 1996).

1 Morrow County

2 The LJF, including the proposed LJIIB components, is at least six miles from the
3 nearest locations in Morrow County. The Morrow County Comprehensive Plan (MCCP) is
4 the applicable local land use plan for the County. The “Natural Resources Element” of the
5 MCCP addresses scenic resources and states that the County has not designated any
6 significant scenic resources.¹⁶⁷

7 Klickitat County

8 The LJF, including the proposed LJIIB components, is at least two miles from the
9 nearest locations in Klickitat County. The applicable local land use plan is the Klickitat
10 County Comprehensive Plan. The comprehensive plan does not identify any scenic
11 resources.¹⁶⁸

12 City of Arlington

13 The City of Arlington Comprehensive Plan includes only one reference to scenic
14 resources or values.¹⁶⁹ The reference is as follows:

15 *Goal 5. Open Space, Scenic and Historic Areas, and Natural Resources*

16 *F. Outstanding Scenic View and Sites*

17 *The views outside the City to the east, west, and north are considered scenic views*
18 *and the topography of the City tends to protect those views as development occurs.*

19 The identified scenic resources are the views to the east, west and north of the city
20 (views toward the Columbia River). The LJF is located south of the City of Arlington. The
21 Council finds that the LJF, including the LJIIB components, would not result in a significant
22 adverse impact to the scenic resources identified in the Arlington land use plan.

Conclusions of Law

23 For the reasons discussed above, the Council finds that the design, construction and
24 operation of the LJF, including the proposed LJIIB components, are not likely to result in
25 significant adverse impact to scenic resources and values identified as significant or important
26 in local land use plans, tribal land management plans and federal land management plans for
27 any lands located within the analysis area. Based on these findings and subject to the site
28 certificate conditions, the Council concludes that the LJF would comply with the Council’s
29 Scenic Resources Standard if Amendment #1 were approved.

(e) Recreation

30 **OAR 345-022-0100**

31 *(1) Except for facilities described in section (2), to issue a site certificate, the*
32 *Council must find that the design, construction and operation of a facility, taking*
33 *into account mitigation, are not likely to result in a significant adverse impact to*
34 *important recreational opportunities in the analysis area as described in the*

¹⁶⁷ MCCP, p. 120.

¹⁶⁸ Email from Curt Dreyer, Klickitat County Planning Director, December 19, 2007 (in the record of the site certificate application for the Shepherds Flat Wind Farm).

¹⁶⁹ Request for Amendment #1, Section 4, p. 41.

1 *project order. The Council shall consider the following factors in judging the*
2 *importance of a recreational opportunity:*

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

4 (b) *The degree of demand;*

5 (c) *Outstanding or unusual qualities;*

6 (d) *Availability or rareness;*

7 (e) *Irreplaceability or irretrievability of the opportunity.*

8 * * *

Findings of Fact

9 In the *Final Order on the Application*, the Council found that the design, construction
10 and operation of the LJF, taking mitigation into account and subject to the conditions stated in
11 the order, were not likely to result in significant adverse impacts to recreational opportunities
12 in the analysis area.¹⁷⁰ Amendment #1 would change the site boundary of the LJF and
13 authorize the construction of the LJIIB components. The Council must decide whether the
14 design, construction and operation of the LJF would have a significant adverse impact to
15 important recreational opportunities in the analysis area if Amendment #1 were approved.

16 The area within the site boundary is privately owned (except for public road rights-of-
17 way), and it contains no County, State or federal recreational facilities. In the *Final Order on*
18 *the Application*, the Council found that the recreational opportunities in the analysis area
19 include camping, hiking, upland bird and big game hunting, boating, fishing, sightseeing,
20 nature and wildlife photography, wind surfing and bicycling.¹⁷¹ The Council found that
21 opportunities for the public to view the ONHT alignment is an important recreational
22 opportunity but that the other recreational opportunities in the analysis area are not important
23 recreational opportunities according to the factors listed in the Recreation Standard. In the
24 *Final Order*, the Council found that the LJF would not interfere significantly with public
25 viewing of the ONHT alignment.¹⁷²

26 The presumed alignment of the ONHT crosses the LJIIB area.¹⁷³ The Council has
27 found that the opportunity to view developed areas of the alignment is common and
28 replaceable, although views of intact segments are rare and irreplaceable.¹⁷⁴ No intact portions
29 of the ONHT are visible from county roads or public viewing areas in the analysis area.¹⁷⁵
30 The Council finds that the design, construction and operation of the LJF, with the LJIIB
31 components, are not likely to result in significant adverse impacts to recreational opportunities
32 in the analysis area.

¹⁷⁰ *Final Order on the Application* (September 21, 2007), p. 65.

¹⁷¹ *Final Order on the Application* (September 21, 2007), p. 64.

¹⁷² *Final Order on the Application* (September 21, 2007), p. 65.

¹⁷³ Request for Amendment #1, Section 4, p. 45, and Attachment 1, Figure 24.

¹⁷⁴ *Final Order on the Application* (September 21, 2007), p. 65.

¹⁷⁵ Request for Amendment #1, Section 4, p. 45.

Conclusions of Law

1 Based on the findings discussed above and subject to the site certificate conditions, the
2 Council concludes that the LJF would comply with the Council’s Recreation Standard if
3 Amendment #1 were approved.

(f) Public Health and Safety Standards for Wind Energy Facilities

OAR 345-024-0010

4 *To issue a site certificate for a proposed wind energy facility, the Council must*
5 *find that the applicant:*
6

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

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

Findings of Fact

13 In the *Final Order on the Application*, the Council found that the certificate holder
14 could design, construct and operate the LJF to exclude members of the public from close
15 proximity to the turbine blades and electrical equipment, to preclude structural failure of the
16 tower or blades that could endanger the public safety and to have adequate safety devices and
17 testing procedures.¹⁷⁶ Those findings are incorporated herein by this reference. To ensure
18 public safety, the Council included Conditions 12, 27, 39, 50, 51, 53, 54, 55, 56, 57, 58 and
19 59 in the site certificate.

20 Similar public safety considerations would apply to the LJIIB components. The
21 certificate holder proposes that the Council revise the setback requirements in Condition 39 to
22 conform to setback distances that the Council has required for other wind energy facilities.¹⁷⁷
23 The Council modifies Condition 39 as discussed in Revision 12.

24 Both the Federal Aviation Administration (FAA) and the Oregon Department of
25 Aviation are responsible for determining whether any turbine tower presents a hazard to
26 aviation in Oregon.¹⁷⁸ Condition 53 requires the certificate holder to submit a Notice of
27 Proposed Construction or Alteration to the FAA before construction when the final design
28 location of a turbine or met tower is known. If the FAA finds that a proposed turbine would
29 not present a safety hazard, the FAA issues a “Determination of No Hazard to Air
30 Navigation” letter. The certificate holder must receive the FAA determination before
31 beginning construction of each turbine. In Revision 18, the Department recommended
32 modification of Condition 53 to require the submission of Notices of Proposed Construction
33 or Alteration to the Oregon Department of Aviation, as required under OAR 738-070-0080. In
34 response to a Notice of Proposed Construction or Alteration, the Oregon Department of

¹⁷⁶ *Final Order on the Application* (September 21, 2007), p. 66.

¹⁷⁷ Request for Amendment #1, Section 4, p. 50.

¹⁷⁸ ORS 836.530 authorizes the Oregon Department of Aviation to adopt rules to “define physical hazards to air navigation and determine whether specific types or classes of objects or structures constitute hazards.” The agency has adopted rules in OAR Chapter 738, Division 70, regarding physical hazards to air safety.

1 Aviation makes a determination whether the proposed construction would be a hazard to air
2 navigation and whether further aeronautical study is necessary.¹⁷⁹

Conclusions of Law

3 For the reasons discussed above and subject to the site certificate conditions discussed
4 herein, the Council concludes that the LJF would comply with the Council’s Public Health
5 and Safety Standards for Wind Energy Facilities if Amendment #1 were approved.

(g) Siting Standards for Wind Energy Facilities

OAR 345-024-0015

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

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

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

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

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

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

20 *(6) Using the minimum lighting necessary for safety and security purposes and*
21 *using techniques to prevent casting glare from the site, except as otherwise*
22 *required by the Federal Aviation Administration or the Oregon Department of*
23 *Aviation.*

Findings of Fact

24 In the *Final Order on the Application*, the Council found that the certificate holder
25 could design and construct the LJF to reduce visual impact, to restrict public access and to
26 reduce cumulative adverse environmental impacts in the vicinity to the extent practicable in
27 accordance with the requirements of OAR 345-024-0015.¹⁸⁰ Those findings are incorporated
28 herein by this reference.

29 Approval of Amendment #1 would reduce the number of turbines authorized for
30 construction at the LJF from 133 to 127. The amendment would enlarge the facility site from
31 approximately 6,404 acres to approximately 14,366 acres.¹⁸¹

32 The current site certificate authorizes construction of approximately 21 miles of new
33 access roads in the LJIIA area and improvement of approximately 7 miles of existing roads,

¹⁷⁹ OAR 738-070-0090.

¹⁸⁰ *Final Order on the Application* (July 25, 2008), pp. 79-85.

¹⁸¹ Based on Table 7 herein.

1 but the certificate holder is planning to build only 13.7 miles of new access roads and to
2 widen approximately 4.5 miles of existing roads in the LJIA area.¹⁸² If Amendment #1 were
3 approved, the certificate holder would be authorized to construct up to 20.9 miles of new
4 access roads in the LJIB area.¹⁸³ In addition, the certificate holder would be authorized to
5 improve up to 5.4 miles of County roads and 0.6 miles of existing private roads.

6 The site certificate authorizes construction of a power collection system of up to 33.2
7 miles of 34.5-kV collector lines but not more than 9.9 miles of aboveground collector lines in
8 the LJIA area.¹⁸⁴ The certificate holder is planning to build approximately 20.9 miles of 34.5-
9 kV collector lines in the LJIA area with only 2.7 miles of aboveground collector lines.¹⁸⁵ The
10 amendment would authorize up to 22.3 miles of collector lines in the LJIB area but not more
11 than 6.7 miles of aboveground collector lines.¹⁸⁶

12 The amendment would add an aboveground transmission interconnection line
13 approximately 6.1 miles in length configured either as a 230-kV transmission line or as two
14 double-circuit 34.5-kV lines running parallel.¹⁸⁷ The amendment would authorize the
15 construction of a substation in the LJIB area.¹⁸⁸

A. Access Roads

16 The Council's standard encourages the use of existing roads to provide access to the
17 facility site, minimizing the amount of land used for new roads and locating new roads in a
18 manner that reduces adverse environmental impacts. The certificate holder considered
19 potential adverse environmental impacts in locating proposed new access roads for LJIB.
20 New access roads are needed where existing roads do not provide access to the proposed
21 turbine locations. Condition 41 requires the certificate holder to locate access roads to
22 minimize disturbance of farming practices. Condition 84 requires the certificate holder to
23 design and construct access roads (and other facility components) that are the minimum size
24 necessary for safe operation of the facility.

B. Transmission Lines and Substations

25 The standard encourages the use of underground transmission lines, combining
26 transmission routes and minimizing the number of new substations. The collector system for
27 the LJF, including the collector lines that would be added by Amendment #1, would be built
28 underground to the extent practical (Condition 78). If the 230-kV interconnection line option
29 is built, then the certificate holder would also build a new substation in the LJIB area.
30 Alternatively, the certificate holder could construct parallel double-circuit 34.5-kV
31 transmission lines for the interconnection and avoid construction of the substation.

C. Wildlife Protection

32 The standard encourages the certificate holder to design the facility to reduce the risk
33 of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.

¹⁸² Response to RAI, Attachment G, Table 2.

¹⁸³ Response to RAI, Attachment 1, Table 1.

¹⁸⁴ *Final Order on the Application* (September 21, 2007), p. 11.

¹⁸⁵ Response to RAI, Attachment G, Table 1.

¹⁸⁶ Request for Amendment #1, Section 4, p. 3, and Response to RAI, Summary of Modifications.

¹⁸⁷ Request for Amendment #1, Section 4, p. 4, and Response to RAI, Summary of Modifications.

¹⁸⁸ Request for Amendment #1, Section 4, p. 3.

1 Condition 83 requires the certificate holder to design the transmission lines to minimize raptor
2 injury by conforming to Avian Powerline Interaction Committee (APLIC) suggested practices
3 for raptor protection on power lines. The Council modifies Condition 83 to update the APLIC
4 guidelines to the current guidance issued in 2006.¹⁸⁹ Condition 59 requires that pad-mounted
5 transformers be designed to avoid the creation of artificial habitat for raptor prey. Condition
6 60 requires turbine pad areas to be graveled to reduce the potential for erosion and weed
7 infestation. Condition 55 requires the use of smooth towers that reduce horizontal perching
8 opportunities. Meteorological towers must be designed without guy wires for support.
9 Condition 84 requires the certificate holder to avoid permanent and temporary disturbance of
10 all Category 1 habitat and to reduce the impact on essential or important habitat (Category 4
11 and above) to the extent practical. Other conditions to protect wildlife and wildlife habitat are
12 referenced in the discussion of the Council’s Fish and Wildlife Habitat Standard at page 63
13 below.

D. Visual Features

14 The standard encourages facility design that minimizes adverse visual features but
15 recognizes that it is not “practicable” to make wind turbine towers invisible. The Council
16 adopted Conditions 90, 91 and 92 to reduce the visual impact of the LJIA components, and
17 these conditions would apply to the LJIB components as well. The amendment does not
18 increase the number of turbines. The certificate holder intends to reduce the density of
19 turbines, especially in the LJIA area, where 43 turbines are planned for construction (a
20 reduction from the 133 turbines previously authorized). Overall turbine density, including the
21 LJIB area, would be a maximum of 127 turbines within a 14,366-acre site, or 1 turbine per
22 113 acres.

E. Lighting

23 The standard requires the use of the minimum lighting necessary for safety and
24 security purposes and the use of techniques to prevent casting glare from the site but does not
25 restrict the use of lighting otherwise required by the FAA or the Oregon Department of
26 Aviation.

27 Condition 92 limits the use of lighting at the facility. During the review of the
28 amendment request, the certificate holder requested modification of Condition 92 to allow the
29 use of lighting for nighttime construction.¹⁹⁰ The Department suggested language similar to
30 that used in Condition 52(d) of the *Third Amended Site Certificate for the Biglow Canyon*
31 *Wind Farm*. The certificate holder objected to the language in the Biglow condition that
32 requires approval by the owners of the properties on which illuminated nighttime construction
33 work would occur and that requires notification of all residents within one-half mile of the
34 construction site. The certificate holder felt that “requiring additional notification simply
35 interferes with IBR’s relationship with landowners” and that requiring property-owner
36 approval “is a matter properly addressed under IBR’s leases.”¹⁹¹ The certificate holder
37 proposed instead that Condition 92 be modified to allow “minimum lighting necessary for
38 construction” and to require that such lighting be shielded or downward-directed to reduce

¹⁸⁹ The certificate holder agrees with this change. Response to RAI (table), p. 16 (response to Request #11).

¹⁹⁰ Response to RAI (table), p. 16 (response to request #12).

¹⁹¹ Email from Elaine Albrich, attorney for IBR, October 8, 2009.

1 glare.” The Council modifies Condition 92, as described in Revision 30, based on the
2 language proposed by the certificate holder.

Conclusions of Law

3 Based on these findings and subject to site certificate conditions described herein, the
4 Council concludes that the LJF would comply with the Council’s Siting Standards for Wind
5 Energy Facilities if Amendment #1 were approved.

(h) Siting Standards for Transmission Lines

OAR 345-024-0090

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

8
9 *(1) Can design, construct and operate the proposed transmission line so that*
10 *alternating current electric fields do not exceed 9 kV per meter at one meter above*
11 *the ground surface in areas accessible to the public;*

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

Findings of Fact

A. Electric Fields

15 In the *Final Order on the Application*, the Council found that the certificate holder
16 could design and construct the LJF transmission lines so that electric fields would not exceed
17 9 kV per meter at one meter above ground surface in areas accessible to the public.¹⁹² The
18 Council found that the certificate holder could design, construct and operate the proposed
19 transmission lines so that induced currents resulting from the transmission lines and related or
20 supporting facilities would be as low as reasonably achievable.

21 The proposed LJIB components include underground and aboveground 34.5-kV
22 collector lines. The certificate holder would design and construct the collector lines for LJIB
23 according to the same specifications discussed in the *Final Order* for the LJIA collector
24 lines.¹⁹³ The Council finds the previous findings regarding LJIA collector line compliance
25 with the electric field standard apply as well to the LJIB collector lines.

26 In the amendment request, the certificate holder requests the option to transmit the
27 power generated by the LJIB turbines to the LJIA substation by either of two methods. One
28 option would be the use of two double-circuit 34.5-kV lines running parallel to each other
29 from the LJIB area to the LJIA substation. The other option would be to collect the power
30 from the LJIB turbines at a new substation where the power would be stepped up to 230 kV.
31 The certificate holder would build a 230-kV aboveground transmission line to carry the power
32 from the LJIB substation to the LJIA substation. The 230-kV line would be carried on
33 monopole or H-frame support structures.¹⁹⁴

¹⁹² *Final Order on the Application* (September 21, 2007), p. 73.

¹⁹³ *Final Order on the Application* (September 21, 2007), p. 73.

¹⁹⁴ Request for Amendment #1, Attachment 1, Figures 5-7.

1 **Parallel Double-Circuit 34.5-kV Transmission Lines**

2 The amendment request includes an electric field analysis of the parallel double-circuit
3 34.5-kV interconnection option.¹⁹⁵ The analysis assumed a distance of 75 feet between the
4 centerlines of each line and a minimum clearance of 25 feet from the ground at mid-span. The
5 results of the modeling analysis predicted a maximum electric field at one meter above
6 ground of 0.208 kV/m.¹⁹⁶ This is well within the Council’s standard of not more than 9 kV
7 per meter.

8 **Aboveground 230-kV Transmission Line**

9 The amendment request includes an analysis of the electric field under the proposed
10 230-kV transmission line option.¹⁹⁷ The analysis considered configurations using monopole
11 supports and using H-type support structures. A minimum clearance of 30 feet above ground
12 at mid-span was assumed for both types of supports. The results of the modeling analysis
13 predicted a maximum electric field at one meter above ground of 2.626 kV/m for the H-type
14 supports and 2.253 kV/m for the monopole supports. Either configuration would result in an
15 electric field within the Council’s standard.

16 **Measures to Reduce Electric Field Hazards**

17 There are no residences or buildings occupied by the public within 200 feet of either
18 side of the proposed interconnection transmission lines.¹⁹⁸ The certificate holder would reduce
19 electric fields by configuring conductor placement and separation to result in partial
20 cancellation of the fields. An induced voltage hazard occurs on fences or other structures that
21 parallel overhead transmission lines. This hazard would be reduced by grounding the fence
22 wires along the length of the fence.

23 Condition 17 requires the certificate holder to design, construct and operate all facility
24 transmission lines in accordance with the requirements of the National Electrical Safety Code.
25 The condition also requires grounding of fences and other structures that could become
26 charged with electricity due to induced voltage from overhead transmission lines. Condition
27 80 requires the certificate holder to design and maintain facility transmission lines so that
28 electric fields during operation do not exceed 9 kV per meter at one meter above the ground
29 surface in areas accessible to the public and so that induced voltages during operation are as
30 low as reasonably achievable.

Conclusions of Law

31 Based on these findings and subject to the site certificate conditions described herein,
32 the Council concludes that the LJV would comply with the Council’s Siting Standards for
33 Transmission Lines if Amendment #1 were approved.

¹⁹⁵ Request for Amendment #1, Section 4, pp. 53-54, and Attachment 9 (Addendum to Leaning Juniper II Wind Power Facility Exhibit AA Electromagnetic Field Analysis).

¹⁹⁶ The certificate holder used the EPRI EMF Workstation: ENVIRO program to perform the analysis.

¹⁹⁷ Request for Amendment #1, Section 4, pp. 53-54, and Attachment 9 (Addendum to Leaning Juniper II Wind Power Facility Exhibit AA Electromagnetic Field Analysis).

¹⁹⁸ Request for Amendment #1, Section 4, p. 13.

4. Standards to Protect Wildlife

(a) Threatened and Endangered Species

OAR 345-022-0070

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

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

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

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

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

Findings of Fact

In the *Final Order on the Application*, the Council found that the design, construction and operation of the LJF, taking mitigation into account and subject to site certificate conditions, did not have the potential to significantly reduce the likelihood of the survival or recovery of any threatened or endangered plant or wildlife species listed under Oregon law.¹⁹⁹ The Council made findings regarding threatened or endangered plant and wildlife species within the LJIIA analysis area.²⁰⁰ Those findings are incorporated herein by this reference.

The amendment request includes a supplemental analysis of threatened or endangered plant and wildlife species within an analysis area including the LJIIB area and the surrounding areas within 5 miles.²⁰¹

A. Plant Species

Special-status plant species surveys were conducted in May and June, 2009, within survey corridors around the proposed LJIIB components. One State-listed threatened plant species (Laurent's milk-vetch) was observed within the survey corridor.²⁰² This species was observed at elevations of 800 to 860 feet.²⁰³ Potential adverse impacts on Laurent's milk-vetch were previously considered unlikely because this species "is generally found at

¹⁹⁹ *Final Order on the Application* (September 21, 2007), p. 80.

²⁰⁰ *Final Order on the Application* (September 21, 2007), pp. 74-79.

²⁰¹ Request for Amendment #1, Attachment 7 (Supplemental 2008-2009 Study to the 2005 Leaning Juniper Wildlife Baseline Study).

²⁰² The species is identified as "Laurence's milk-vetch" in the *Final Order on the Application* (September 21, 2007), pp. 75-76.

²⁰³ Response to RAI (table), p. 16 (response to Request #10).

1 elevations between 1,950 and 3,600 feet.”²⁰⁴ One State Candidate plant species (sessile
2 mousetail) was observed just outside the site boundary.

3 Condition 84 requires the certificate holder to install exclusion fencing around
4 confirmed populations of sessile mousetail as a protective measure during construction. In
5 Revision 24, the Council modifies Condition 84 to provide the same protection of confirmed
6 populations of Laurent’s milk-vetch.

7 During the surveys, three rare plant species that are tracked by the Oregon Natural
8 Heritage Program were observed (stalked-pod milk-vetch, Columbia milk-vetch and
9 Columbia bladderpod). These species are not listed as threatened or endangered; nor are they
10 listed as Candidate species.²⁰⁵ The survey report concluded that construction of the LJIIB
11 components could result in temporary and permanent impacts to stalked-pod milk-vetch and
12 Columbia milk-vetch but that significant adverse impact to populations of these species would
13 be unlikely.²⁰⁶

14 The Council finds that the design, construction and operation of the proposed LJIIB
15 components, subject to the site certificate conditions discussed herein, are not likely to cause a
16 significant reduction in the likelihood of survival or recovery of any State-listed threatened or
17 endangered plant species.

B. Fish and Wildlife Species

18 Washington ground squirrel (*Spermophilus washingtoni*) is a mammal species that is
19 State-listed as endangered. Bald eagle (*Haliaeetus leucocephalus*) is a raptor that is State-
20 listed as threatened. The Council has previously found that these two State-listed wildlife
21 species potentially occur within the analysis areas for the LJF.²⁰⁷ Special status vertebrate
22 wildlife surveys were conducted in April and May, 2009, within survey corridors around the
23 proposed LJIIB components.

Washington Ground Squirrel

24
25 In the *Final Order on the Application*, the Council found that active Washington
26 ground squirrel (WGS) sites exist within the LJIIA area.²⁰⁸ During the wildlife surveys
27 conducted in 2009, WGS were observed at numerous locations within the LJIIB survey
28 corridors.²⁰⁹ Condition 85 requires preconstruction survey and marking of an exclusion area
29 around WGS areas. The Council modifies Condition 85 to require the preconstruction WGS
30 survey to be done before each phase of construction.

²⁰⁴ CH2M HILL, *Rare Plant Survey Addendum Leaning Juniper II Wind Energy Project, Gilliam County, Oregon* (September 1, 2006), Leaning Juniper II Wind Power Facility Application for Site Certificate, Attachment Q-1, p. 2.

²⁰⁵ A “candidate species” is “any plant species designated for study by the director [of the Oregon Department of Agriculture] whose numbers are believed low or declining, or whose habitat is sufficiently threatened and declining in quantity and quality, so as to potentially qualify for listing as a threatened or endangered species in the foreseeable future.” OAR 603-073-0002.

²⁰⁶ Supplemental 2008-2009 Study to the 2005 Leaning Juniper Wildlife Baseline Study, p. 23 (Request for Amendment #1, Attachment 7).

²⁰⁷ *Final Order on the Application* (September 21, 2007), pp. 76-77.

²⁰⁸ *Final Order on the Application* (September 21, 2007), pp. 78-79.

²⁰⁹ Supplemental 2008-2009 Study to the 2005 Leaning Juniper Wildlife Baseline Study, p. 19 and Table 12 (Request for Amendment #1, Attachment 7).

1 See page 70 below for a discussion of WGS habitat. ODFW considers the area within
2 785 feet of identified WGS burrows in the LJIIB area to be “essential and limited” habitat that
3 is “irreplaceable” (Category 1 habitat). Condition 84 requires avoidance of permanent or
4 temporary disturbance of Category 1 habitat.

5 Because the certificate holder would avoid disturbance of Category 1 WGS habitat,
6 the Council finds that the design, construction and operation of the LJF, including the
7 proposed LJIIB components, are unlikely to cause a significant reduction in the likelihood of
8 survival or recovery of the species.

9 **Bald Eagle**

10 The bald eagle is generally associated with freshwater, estuarine and marine
11 ecosystems that provide abundant prey and suitable habitat. Bald eagles winter along the
12 Columbia River north of the project area. The eagles concentrate their foraging and roosting
13 in areas along or close to the Columbia River, but they might scavenge on carrion and small
14 mammals in the upland areas. Bald eagles might pass through the LJIIB site infrequently
15 during spring and fall migration or during the winter. No bald eagles were observed during
16 the avian use surveys conducted during fall and winter 2008-2009 or during the special status
17 wildlife surveys conducted in April and May of 2009 in and around the LJIIB site.²¹⁰ The
18 Council finds that the design, construction, operation and retirement of the proposed LJIIB
19 components are unlikely to have any significant adverse impact on bald eagles.

20 One golden eagle was observed by surveyors while they were traveling to the winter
21 season avian use survey points outside the LJIIB site boundary. Although the golden eagle is
22 not a State-listed threatened or endangered species, bald eagles and golden eagles are
23 protected under the federal Bald and Golden Eagle Protection Act. If eagle fatalities are
24 discovered during post-construction monitoring required under the *Wildlife Monitoring and*
25 *Mitigation Plan*, the certificate holder would notify the U.S. Fish and Wildlife Service,
26 ODFW and the Department. If appropriate, additional mitigation measures would then be
27 implemented (Condition 87).

28 **Conclusions of Law**

29 For the reasons discussed above and subject to the site certificate conditions described
30 herein, the Council concludes that the LJF would comply with the Council’s Threatened and
31 Endangered Species Standard if Amendment #1 were approved.

32 **(b) Fish and Wildlife Habitat**

33 **OAR 345-022-0060**

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

²¹⁰ Supplemental 2008-2009 Study to the 2005 Leaning Juniper Wildlife Baseline Study, pp. 16-17, Tables 9 and 10 and Appendix R (Request for Amendment #1, Attachment 7).

Findings of Fact

A. Habitat Impacts

1 In the *Final Order on the Application*, the Council found that the design, construction
2 and operation of the LJF would be consistent with ODFW's habitat mitigation goals and
3 standards.²¹¹ The Council made findings regarding the characteristics of the habitat types
4 within the site boundary and the State sensitive species observed within or near the lease
5 boundaries during avian point-counts and other wildlife surveys.²¹² To estimate the maximum
6 habitat impacts that could result from construction of the LJF, the applicant assumed a layout
7 of turbines and other facility components within the micro-siting corridors that would
8 maximize the impact on higher-value habitat. The maximum impact habitat assessment for
9 LJIIA is shown in Table 11 of the *Final Order*.

10 During the Department's review of the Request for Amendment #1, the certificate
11 holder developed the final design configuration for the LJIIA area. Table 6 below is the final
12 design habitat assessment for LJIIA.²¹³

Table 6: LJIIA Final Design Habitat Impacts

Habitat type	Habitat subtype	Area of LJIIA construction impact (acres)	Area of LJIIA permanent impact (acres)
Category 1			
CRP or other planted grassland	DC	0	0
Escarpment	ESC	0	0
Annual grass and weeds with residual native bunchgrass	GA	0	0
Perennial bunchgrass	GB	0	0
Open low shrub	SSA	0	0
Shrub-grass	SSB	0	0
Juniper woodland	WJ	0	0
Subtotal		0	0

²¹¹ *Final Order on the Application* (September 21, 2007), p. 102.

²¹² *Final Order on the Application* (September 21, 2007), pp. 82-91.

²¹³ The *Habitat Mitigation Plan*, which is incorporated in Condition 89, requires the certificate holder to provide a habitat assessment table based on the final design configuration.

Category 2			
Escarpment	ESC	0	0
Annual grass and weeds with residual native bunchgrass	GA	0	0
Perennial bunchgrass	GB	0	0
Shrub-grass	SSA	12.69	1.56
Open low shrub	SSB	32.62	4.52
Purple sage/Sandberg's bluegrass with non-native annual grasses	SSD	0	0
Bitterbrush/buckwheat, bunchgrass - Annual grass	SSE	5.50	0.20
Juniper woodland	WJ	0	0
Deciduous woodland	WL	0	0
Subtotal		50.80	6.28
Category 3			
Old field	DB	0	0
CRP or other planted grassland	DC	0	0
Annual grass and weeds with residual native bunchgrass	GA	0	0
Shrub-grass	SSA	1.80	0.59
Open low shrub	SSB	107.32	12.77
Open low shrub (buckwheat)/ Sandberg's bluegrass with non-native annual grasses	SSC	0.44	0.12
Purple sage/Sandberg's bluegrass with non-native annual grasses	SSD	0	0
Subtotal		109.56	13.48
Category 4			
Old field	DB	2.62	0.81
Other disturbed ground	DX	0	0
Exposed basalt	EB	0	0
Annual grass and weeds with residual native bunchgrass	GA	1.92	0.58
Open low shrub	SSB	0	0
Open low shrub (buckwheat)/ Sandberg's bluegrass with non-native annual grasses	SSC	0	0
Subtotal		4.54	1.38
Category 5			
Old field	DB	6.98	1.34
Subtotal		6.98	1.34

Category 6			
Old field	DB	2.18	3.01
Farmyard	DF	0.17	0.11
Quarry	DQ	0	0
Dryland wheat	DW	99.90	13.07
Other disturbed ground	DX	0.35	0.23
Subtotal		102.59	16.42
TOTAL		274.47	38.91

1 The amendment request includes a report on field surveys of the LJIIB area conducted
2 by Northwest Wildlife Consultants (NWC) in 2008 and 2009.²¹⁴ The NWC study included
3 habitat assessment and mapping for the LJIIB area, special status plant surveys (spring 2009),
4 avian use surveys (fall and winter 2008; spring 2009), raptor nest surveys (2009), Washington
5 ground squirrel surveys (2008 and 2009) and other special status wildlife surveys (2009).

6 OAR 635-415-0025 defines six categories of habitat in order of their value to wildlife.
7 The rule establishes mitigation goals and corresponding implementation standards for each
8 habitat category.²¹⁵ In the amendment request, the certificate holder classified the habitat
9 within the LJIIB area according to ODFW categories.²¹⁶ The habitat categories are mapped
10 within the LJIIB area as shown on Figures 2, 2a, 2b and 2c.²¹⁷

11 To describe the habitat impacts that are likely to occur due to construction of the LJIIB
12 components, the certificate holder estimated the permanent footprint impacts and temporary
13 construction impacts in each habitat type, as shown in Table 7, based on the expected
14 (current) facility layout. The table also shows the total acres of each habitat type within the
15 LJIIA and LJIIB areas.²¹⁸

16 The Council made findings regarding on-site characteristics of the habitat subtypes
17 within each habitat category in the LJIIA area.²¹⁹ Similar characteristics describe the same
18 habitat subtypes in the LJIIB area, and the Council’s earlier findings are incorporated herein
19 by this reference. Some of the “open low shrub” (SSB) found within the LJIIB area was rated
20 as Category 4 due to its condition and location.²²⁰ This habitat is located along a public
21 highway and a secondary road, and although it is structurally functional for wildlife, human
22 disturbance from traffic on the roadways limits wildlife use. Habitat subtype “DC” (CRP or
23 other planted grassland) was not identified in the LJIIA area, but is shown in Table 7 in
24 Categories 1 and 3. This disturbed habitat is rated Category 1 where it exists within the 785-
25 foot WGS buffer area, described below at page 70.

²¹⁴ Request for Amendment #1, Attachment 7.

²¹⁵ The Council discussed the six habitat categories and the mitigation goals in the *Final Order on the Application* (September 21, 2007), pp. 80-81.

²¹⁶ Request for Amendment #1, Section 4, p. 33, and Attachments 3 and 7; Response to RAI (table), p.1 (response to email of 7/22/09), and Attachment A, revised Tables 3 and 4.

²¹⁷ Response to RAI, Attachment B.

²¹⁸ In contrast to Table 11 in the *Final Order on the Application* (September 21, 2007), Table 7 shows the total area within the site boundaries for LJIIA and LJIIB rather than the total area within the certificate holder’s lease boundary (LJIIA).

²¹⁹ *Final Order on the Application* (September 21, 2007), pp. 86-89.

²²⁰ Request for Amendment #1, Attachment 7, p. 13.

Table 7: LJIB Current Layout Habitat Impacts²²¹

Habitat type	Habitat subtype	Area of LJIB construction impact (acres)	Area of LJIB permanent impact (acres)	Total LJIB area (acres)	Total LJIA area (acres)
Category 1					
CRP or other planted grassland	DC	0	0	12.56	0
Escarpment	ESC	0	0	0	< 0.01
Annual grass and weeds with residual native bunchgrass	GA	0	0	11.13	6.60
Perennial bunchgrass	GB	0	0	4.18	0
Open low shrub	SSA	0	0	22.29	21.29
Shrub-grass	SSB	0	0	443.45	67.11
Juniper woodland	WJ	0	0	3.01	0.05
Subtotal		0	0	496.61	95.06
Category 2					
Escarpment	ESC	0	0	0	24.52
Annual grass and weeds with residual native bunchgrass	GA	0	0	0.40	0
Perennial bunchgrass	GB	0.09	0	33.48	32.51
Shrub-grass	SSA	2.98	0.03	120.46	296.53
Open low shrub	SSB	60.11	9.37	612.96	884.61
Purple sage/Sandberg's bluegrass with non-native annual grasses	SSD	0	0	0	6.05
Bitterbrush/buckwheat, bunchgrass - Annual grass	SSE	0	0	0	193.71
Juniper woodland	WJ	6.60	0.30	178.95	69.48
Deciduous woodland	WL	0	0	0	3.37
Subtotal		69.78	9.7	946.26	1,510.79
Category 3					
Old field	DB	0	0	0	2.15
CRP or other planted grassland	DC	66.92	8.39	449.97	0
Annual grass and weeds with residual native bunchgrass	GA	0.63	0.01	13.44	19.36
Shrub-grass	SSA	0.31	< 0.01	2.57	48.65
Open low shrub	SSB	74.55	5.81	1,059.03	1,677.84
Open low shrub (buckwheat)/ Sandberg's bluegrass with non-native annual grasses	SSC	0	0	0	4.94
Purple sage/Sandberg's bluegrass with non-native annual grasses	SSD	0	0	0	0.18
Subtotal		142.40	14.22	1,525.02	1,753.11

²²¹ Based on revised Table 3, Response to RAI, Attachment A, and revised Table 3, Response to Additional RAI, Attachment 2.

Category 4					
Old field	DB	0.84	0.01	1.44	83.77
Other disturbed ground	DX	1.01	0.01	0	33.83
Exposed basalt	EB	0	0	0	43.83
Annual grass and weeds with residual native bunchgrass	GA	12.27	1.65	227.53	111.67
Open low shrub	SSB	0.99	0.45	19.65	0
Open low shrub (buckwheat)/ Sandberg's bluegrass with non-native annual grasses	SSC	0	0	0	5.46
Subtotal		15.11	2.12	248.62	278.57
Category 5					
Old field	DB	0	0	0	74.68
Subtotal		0	0	0	74.68
Category 6					
Old field	DB	0.11	< 0.01	3.86	40.52
Farmyard	DF	0.84	0	22.85	25.65
Quarry	DQ	0	0	0	32.64
Dryland wheat	DW	342.21	39.69	4,686.90	2,568.57
Other disturbed ground	DX	4.91	6.62	31.65	24.15
Subtotal		348.07	46.32	4,745.26	2,691.53
TOTAL		575.36	72.36	7,961.77	6,403.74

1 To allow for facility micrositing while ensuring that there would be adequate
2 mitigation for potential impacts on high-value habitat, the certificate holder estimated the
3 maximum impacts that the LJIIB components could have on wildlife habitat. The certificate
4 holder created a “worst-case” habitat impact layout by moving the turbines, other facility
5 components and areas of temporary disturbance to locations within the micrositing areas that
6 have higher-quality habitat, compared to the expected layout, excluding Category 1 habitat.²²²
7 Table 8 shows the acres of construction impacts and permanent impacts, based on the
8 maximum-impact layout. Compared to the current layout shown in Table 7, in which 36
9 percent of the total area of impact (including construction impacts and permanent impacts)
10 would affect Category 2 and Category 3 habitat, 45 percent of the impacts from the
11 maximum-impact layout would affect such habitat. The current layout would affect 79 acres
12 of Category 2 habitat while the maximum-impact layout would affect 114 acres of Category 2
13 habitat.

²²² Response to Additional RAI (table) #5, pp. 5-6. The maximum impacts layout is shown in Figures 3, 3a, 3b and 3c (Response to Additional RAI, Attachment 2).

Table 8: LJIB Maximum Habitat Impacts²²³

Habitat type	Habitat subtype	Area of construction impact (acres)	Area of permanent impact (acres)
Category 1			
CRP or other planted grassland	DC	0	0
Escarpment	ESC	0	0
Annual grass and weeds with residual native bunchgrass	GA	0	0
Perennial bunchgrass	GB	0	0
Open low shrub	SSA	0	0
Shrub-grass	SSB	0	0
Juniper woodland	WJ		
Subtotal		0	0
Category 2			
Escarpment	ESC	0	0
Annual grass and weeds with residual native bunchgrass	GA	0	0
Perennial bunchgrass	GB	0.09	0
Shrub-grass	SSA	6.18	0.21
Open low shrub	SSB	80.37	11.24
Purple sage/Sandberg's bluegrass with non-native annual grasses	SSD	0	0
Bitterbrush/buckwheat, bunchgrass - Annual grass	SSE	0	0
Juniper woodland	WJ	15.68	0.72
Deciduous woodland	WL	0	0
Subtotal		102.32	12.16
Category 3			
Old field	DB	0	0
CRP or other planted grassland	DC	70.66	9.24
Annual grass and weeds with residual native bunchgrass	GA	0.63	0.01
Shrub-grass	SSA	0.31	<0.01
Open low shrub	SSB	84.97	6.82
Open low shrub (buckwheat)/ Sandberg's bluegrass with non-native annual grasses	SSC	0	0
Purple sage/Sandberg's bluegrass with non-native annual grasses	SSD	0	0
Subtotal		156.55	16.08

²²³ Based on revised Table 4, Response to RAI, Attachment A.

Category 4			
Old field	DB	0.84	0.01
Other disturbed ground	DX	1.01	0.01
Exposed basalt	EB	0	0
Annual grass and weeds with residual native bunchgrass	GA	10.44	0.98
Open low shrub	SSB	0.99	0.45
Open low shrub (buckwheat)/ Sandberg's bluegrass with non-native annual grasses	SSC	0	0
Subtotal		13.28	1.44
Category 5			
Old field	DB	0	0
Subtotal		0	0
Category 6			
Old field	DB	0.11	<0.01
Farmyard	DF	0.84	0
Quarry	DQ	0	0
Dryland wheat	DW	293.25	34.77
Other disturbed ground	DX	4.91	6.62
Subtotal		299.11	41.38
TOTAL		571.27	71.06

1 Table 8 provides a basis for determining the maximum size of the habitat mitigation
2 area that would be needed for the permanent and temporal impacts of the LJIIB components
3 on wildlife habitat. Although the actual habitat impacts of the facility would not be
4 determined until the final design layout is known, the estimates of maximum impacts on high-
5 value habitat shape the upper bounds of the quantity and quality of mitigation acres that
6 would be required. To calculate the total maximum area of habitat impacts for the facility as a
7 whole, the acres shown in Table 8 must be added to the acres shown in Table 6 (final design
8 impacts for LJIIA).

9 **Washington Ground Squirrel Habitat**

10 As discussed above at page 62, the Washington ground squirrel (WGS) is a State-
11 listed endangered species. Wildlife surveys have found WGS in several locations in both the
12 LJIIA and LJIIB areas.²²⁴

13 In the *Final Order on the Application*, the Council discussed the classification of
14 “patches” of shrub-steppe habitat in the LJIIA area as Category 1, based on the guidance from
15 ODFW that was available at that time.²²⁵ The Council made the following findings:

²²⁴ Northwest Wildlife Consultants, Inc., and WEST, Inc., Wildlife Baseline Study for the Leaning Juniper Wind Power Project (November 3, 2005); Northwest Wildlife Consultants, Inc., Supplemental 2008-2009 Study to the 2005 Leaning Juniper Wildlife Baseline Study (June 18, 2009). The 2009 study is included in the Request for Amendment #1 as Attachment 7.

²²⁵ *Final Order on the Application* (September 21, 2007), p. 87.

1 Based on guidance from ODFW, WGS habitat is considered Category 1 if the habitat is
2 irreplaceable when considering the consequences of a proposed development action. Patches
3 of WGS were found in shrub-steppe habitat in the LJ-South are[a], and these locations are
4 considered Category 1, as described above. The WGS might use adjacent habitat (up to 785
5 feet from the delineated active cluster WGS, a known travel distance for the species) for cover
6 and possibly forage during daily or periodic movements.²²⁶ Because this “squirrel use area”
7 adjacent to the colonies or patches is “replaceable,” it is considered Category 2 habitat. The
8 species is also known to travel longer distances. Habitat in areas of unconfirmed use is
9 considered replaceable because grassland and shrub cover could be restored if disturbed and
10 because of the amount of potentially-suitable habitat in the vicinity.

11 The ODFW guidance described the habitat that should be considered “essential and
12 limited for WGS” as “any habitat that is necessary for WGS colonies including the associated
13 WGS use area for those colonies or habitat that provides necessary movement (connectivity)
14 between existing colonies, previously documented colonies and suitable habitat for future
15 colonies.”²²⁷ If an area of “essential and limited” habitat were found to be “irreplaceable when
16 considering the consequences of a proposed development action,” then ODFW classified the
17 area as Category 1 habitat.²²⁸ If the habitat were found to be “replaceable,” however, then
18 ODFW classified the area as Category 2.

19 In the site certificate application, the applicant noted that a “potential squirrel use
20 area” exists in areas adjacent to WGS “patches” and that this area can extend “up to 785 feet
21 from the delineated active cluster of concentrated squirrel activity.”²²⁹ The applicant reasoned
22 that the “use area” was not “irreplaceable” habitat and therefore rated it as Category 2. In
23 commenting on the application, ODFW did not object to the applicant’s rating of the squirrel
24 use area as Category 2.²³⁰ ODFW recommended that the applicant “survey the full extent of
25 the known colony prior to construction on the boundary closest to the construction zone.”
26 ODFW was concerned that “the colony could grow substantially in a year or two and could
27 very well be right in the middle of the construction zone.” ODFW’s recommendation was
28 incorporated in Condition 85 of the site certificate, which requires, in part: “Before
29 construction begins, the certificate holder shall have a qualified biologist place exclusion
30 markers around sensitive wildlife habitat areas, including Category 1 Washington ground
31 squirrel (WGS) areas and an appropriate buffer around these areas.”

32 In September 2008, a year after the Council issued the site certificate for the LJF,
33 ODFW provided new guidance regarding the classification of WGS habitat. Under the new
34 guidance, a “cluster of holes where the squirrels are residing during the time of a survey is
35 considered Category 1 habitat” and must be avoided.²³¹ In addition, ODFW defined the area

²²⁶ Site Certificate Application (September 2006), p. P-20.

²²⁷ Letter from Kevin Blakely, ODFW, to Peter Mostow, March 15, 2002.

²²⁸ OAR 635-415-0005(14) defines “irreplaceable” as follows:

"Irreplaceable" means that successful in-kind habitat mitigation to replace lost habitat quantity and/or quality is not feasible within an acceptable period of time or location, or involves an unacceptable level of risk or uncertainty, depending on the habitat under consideration and the fish and wildlife species or populations that are affected. "Acceptable", for the purpose of this definition, means in a reasonable time frame to benefit the affected fish and wildlife species.

²²⁹ Site Certificate Application, p. P-20.

²³⁰ Letter from Rose Owens, ODFW, June 20, 2007.

²³¹ Letter from Rose Owens, Oregon Department of Fish and Wildlife, September 15, 2008 (comments on the preliminary application for a site certificate for the Helix Wind Power Facility).

1 “depicted by a 785-foot ring around the outside of the cluster of holes where the Washington
2 ground squirrels are residing” as “required area for squirrel survival” that is also Category 1
3 habitat. The ODFW guidance defines a WGS “colony” as “the cluster of holes as well as the
4 required habitat for squirrel survival.”²³² Habitat adjacent to a WGS “colony” is considered
5 Category 2 habitat if it is of a similar habitat type and quality as the area occupied by the
6 WGS. This adjacent area is defined as “an area of potential Washington ground squirrel use.”

7 The Council applies the September 2008 ODFW guidance on WGS habitat to the
8 identified WGS locations in the LJIIB area but does not apply the guidance retroactively to
9 the WGS locations identified in the LJIIA area as discussed in the *Final Order on the*
10 *Application*.²³³

11 After discussions with the Department and ODFW regarding proper classification of
12 Category 1 WGS habitat, the certificate holder revised the LJIIB layout to avoid disturbance
13 of all Category 1 habitat.²³⁴ The certificate holder submitted revised component layouts,
14 revisions of the habitat mapping and revised habitat impact tables as well as other information
15 requested by the Department regarding the amendment request.²³⁵

16 **Other Special-Status Species**

17 The *Final Order on the Application* describes special-status species observed within
18 and near the LJIIA area.²³⁶ Special-status species observed in the area include seven bird
19 species as well as white-tailed jackrabbit and Northern sagebrush lizard.²³⁷ The same special-
20 status species were observed in the LJIIB area.²³⁸

B. Mitigation and Monitoring

21 In the *Final Order on the Application*, the Council made findings regarding the
22 potential impacts of construction and operation of the LJIIA components on habitat within the
23 site boundary.²³⁹ Those findings are incorporated herein by this reference. Construction and
24 operation of the LJIIB components within the LJIIB area would have the same types of
25 potential habitat impacts on wildlife habitat. The *Final Order on the Application* describes
26 site certificate conditions for mitigation of potential adverse impacts to wildlife and wildlife
27 habitat.²⁴⁰ These conditions would apply as well to the LJIIB area, subject to modifications
28 discussed herein. Among the conditions that address potential impacts to wildlife and wildlife
29 habitat are Conditions 74, 83, 84, 86, 87 and 89, described below.

²³² In discussions with the certificate holder and the Department during the review of this amendment request, ODFW stated that it would consider a single identified WGS hole as a “cluster” for the purposes of defining the Category 1 area.

²³³ *Final Order on the Application* (September 21, 2007), pp. 78-79.

²³⁴ IBR disputes ODFW’s guidance on classification of Category 1 WGS habitat. Although IBR “accepted the setback for purposes of the LJIIB amendment,” IBR notified the Department that “we do not want to waive our right/ability to challenge ODFW’s interpretation for future projects” (email from Sara Parsons, October 14, 2009).

²³⁵ Response to RAI, September 15, 2009, and Response to Additional RAI, October 2, 2009.

²³⁶ The term “special-status species” refers to State-listed threatened, endangered or sensitive species and to federal threatened or endangered species or species of concern.

²³⁷ *Final Order on the Application* (September 21, 2007), pp. 89-91.

²³⁸ Request for Amendment #1, Attachment 7 (Supplemental 2008-2009 Study to the 2005 Leaning Juniper Wildlife Baseline Study), pp. 16-19.

²³⁹ *Final Order on the Application* (September 21, 2007), pp. 91-94.

²⁴⁰ *Final Order on the Application* (September 21, 2007), pp. 94-102.

1 Condition 74 incorporates the *Revegetation Plan* and requires the certificate holder to
2 restore vegetation in areas temporarily disturbed during construction. The Council adopts
3 modifications of the *Revegetation Plan* as described in Revision 20 and in Attachment B.

4 Condition 83 requires the certificate holder to design the transmission line support
5 structures to conform to the avian protection practices recommended by the Avian Power Line
6 Interaction Committee (APLIC). The Council modifies Condition 83 to apply the current
7 APLIC guidance issued in 2006.

8 Condition 84 allows construction of facility components within the approved
9 microsites areas but imposes constraints on the location of components. The certificate
10 holder must avoid causing any temporary or permanent impacts on Category 1 habitat and
11 must design the facility to reduce impacts on essential or important habitat to the extent
12 practical. The condition requires exclusion fencing around identified populations of sessile
13 mousetail, a State Candidate plant species discussed above at page 61. The Council modifies
14 Condition 84 to require exclusion fencing around identified populations of Laurent's milk-
15 vetch, a State-listed threatened plant species. The condition requires the certificate holder to
16 design the facility components so that they occupy the minimum area needed for safe
17 operation. The Condition requires preconstruction surveys for threatened or endangered
18 species in any areas that would be affected by construction, if those areas have not previously
19 been surveyed.

20 Condition 86 requires the certificate holder to avoid or reduce construction activity
21 that could interfere with raptor nesting in areas close to proposed turbine locations. If
22 construction will take place during the sensitive nesting periods for Swainson's hawks,
23 ferruginous hawks or burrowing owls, potential nesting areas near the proposed turbine
24 strings would be surveyed and high-impact construction activities, such as blasting or other
25 major ground disturbance, would be avoided during the nesting period.

26 Condition 87 requires the certificate holder to conduct wildlife monitoring during
27 operation of the facility as described in the *Wildlife Monitoring and Mitigation Plan*
28 (WMMP). The Council adopts modifications of the WMMP as described in Revision 27 and
29 Attachment A.

30 Condition 89 requires the certificate holder to protect and enhance a mitigation area as
31 described in the *Habitat Mitigation Plan*. The Council adopts modifications of the *Habitat*
32 *Mitigation Plan* as described in Revision 29 and in Attachment C. Attachment C describes a
33 440-acre parcel where habitat protection and enhancement are feasible and sufficient land
34 area is available to accommodate the mitigation area that would be required for the LJF,
35 including the areas that would be added under Amendment #1. The characteristics of the 440-
36 acre parcel are described in the *Final Order on the Application*.²⁴¹ The certificate holder has
37 executed an Option for Conservation Easements with the landowner for 280 acres.²⁴²

38 Based on the final habitat assessment for LJIIA, shown in Table 6, a mitigation area of
39 39 acres is needed to mitigate for the habitat impacts of LJIIA. The mitigation area calculation
40 for LJIIA is shown below.

41 Category 2

²⁴¹ *Final Order on the Application* (September 21, 2007), pp. 97-100.

²⁴² Request for Amendment #1, Section 4, p. 34.

1 Footprint impacts: 6.28 acres
2 Temporal impacts to SSA and SSE: 18.19 acres
3 Mitigation area: $(6.28 \text{ acres} \times 2) + (18.19 \text{ acres} \times 0.5) = 21.66 \text{ acres}$

4 Category 3
5 Footprint impacts: 13.48 acres
6 Temporal impacts to SSA: 1.8 acres
7 Mitigation area: $13.48 \text{ acres} + (1.8 \text{ acres} \times 0.5) = 14.38 \text{ acres}$

8 Category 4
9 Footprint impacts: 1.38 acres
10 Mitigation area: 2.1 acres

11 Category 5
12 Footprint impacts: 1.34 acres
13 Mitigation area: 1.34 acres

14 **Total mitigation area for LJIIA (rounded to nearest whole acre): 39 acres**

15 For LJIIIB a mitigation area of up to 53 acres would be needed, based on the maximum
16 habitat impacts shown in Table 8 and the following calculation:

17 Category 2
18 Footprint impacts: 12.16 acres
19 Temporal impacts to SSA, SSE and WJ: 21.86 acres
20 Mitigation area: $(12.16 \text{ acres} \times 2) + (21.86 \text{ acres} \times 0.5) = 35.26 \text{ acres}$

21 Category 3
22 Footprint impacts: 16.07 acres
23 Temporal impacts to SSA: 0.31 acres
24 Mitigation area: $16.07 \text{ acres} + (0.31 \text{ acres} \times 0.5) = 16.23 \text{ acres}$

25 Category 4
26 Footprint impacts: 1.44 acres
27 Mitigation area: 1.44 acres

28 **Total mitigation area for LJIIIB (rounded to nearest whole acre): 53 acres**

29 For the LJF as a whole, including both the LJIIA and LJIIIB areas, a mitigation area of
30 up to 92 acres would be needed. The actual size of the mitigation area is expected to be
31 smaller, as determined by the footprint and temporal impacts of the final design configuration
32 of LJIIIB. Before beginning construction of any phase of the facility, the certificate holder
33 must determine the final size of the mitigation area needed for that phase. The certificate
34 holder must determine the boundaries of the mitigation area in consultation with ODFW and
35 the affected landowners and subject to the approval of the Department. The final mitigation
36 area must contain suitable habitat to achieve the ODFW mitigation goals through appropriate
37 enhancement actions.

Conclusions of Law

38 For the reasons discussed above and subject to the site certificate conditions described
39 herein, the Council concludes that the LJF would comply with the Council's Fish and Wildlife
40 Habitat Standard if Amendment #1 were approved.

5. Standards Not Applicable to Site Certificate Eligibility

1 Under ORS 469.501(4), the Council may issue a site certificate without making the
2 findings required by the standards discussed in this section (Structural Standard, Historic,
3 Cultural and Archaeological Resources Standard, Public Services Standard and Waste
4 Minimization Standard).²⁴³ Nevertheless, the Council may impose site certificate conditions
5 based on the requirements of these standards.

(a) Structural Standard

6 OAR 345-022-0020

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

9 *(a) The applicant, through appropriate site-specific study, has adequately*
10 *characterized the site as to Maximum Considered Earthquake Ground Motion*
11 *identified at International Building Code (2003 Edition) Section 1615 and*
12 *maximum probable ground motion, taking into account ground failure and*
13 *amplification for the site specific soil profile under the maximum credible and*
14 *maximum probable seismic events; and*

15 *(b) The applicant can design, engineer, and construct the facility to avoid dangers*
16 *to human safety presented by seismic hazards affecting the site that are expected to*
17 *result from maximum probable ground motion events. As used in this rule “seismic*
18 *hazard” includes ground shaking, ground failure, landslide, liquefaction, lateral*
19 *spreading, tsunami inundation, fault displacement, and subsidence;*

20 *(c) The applicant, through appropriate site-specific study, has adequately*
21 *characterized the potential geological and soils hazards of the site and its vicinity*
22 *that could, in the absence of a seismic event, adversely affect, or be aggravated by,*
23 *the construction and operation of the proposed facility; and*

24 *(d) The applicant can design, engineer and construct the facility to avoid dangers*
25 *to human safety presented by the hazards identified in subsection (c).*

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

30 * * *

31 Related Conditions

²⁴³ This statute provides that the Council may not impose certain standards “to approve or deny an application for an energy facility producing power from wind.” ORS 469.300 defines an “application” as “a request for approval of a particular site or sites for the construction and operation of an energy facility or the construction and operation of an additional energy facility upon a site for which a certificate has already been issued, filed in accordance with the procedures established pursuant to ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992.” Although ORS 469.501(4) does not explicitly refer to a request for a site certificate amendment, we assume that the Legislature intended it to apply.

1 In the *Final Order on the Application*, the Council made findings regarding the
2 seismic, geological and soil hazards in the area of the LJF.²⁴⁴ Those findings are incorporated
3 herein by this reference. The site certificate includes conditions addressing structural safety
4 (Conditions 12, 13, 14, 49, 50 and 51).

5 CH2M HILL conducted a preliminary geotechnical and geological reconnaissance
6 study of the LJIIB area, and the amendment request includes a summary report.²⁴⁵ According
7 to the report, the LJIIB area is underlain by basalt flows, weakly cemented sedimentary rocks
8 and windblown loess. Loess deposits are shallower in the northern portion of the LJIIB area.
9 The report noted potential geological hazards from slope instability and collapse potential of
10 loess but also noted no evidence of recent slope instability, faulting or ground rupture.

11 Condition 49 requires the certificate holder to perform appropriate site-specific
12 geotechnical investigation before beginning construction and to report the results to the
13 Oregon Department of Geology & Mineral Industries. The Council modifies Condition 49 to
14 require that a site-specific geotechnical investigation for any phase of the facility be
15 performed before beginning construction of that phase. The Council finds that no other
16 changes to the site certificate conditions related to the Structural Standard are needed.

(b) Historic, Cultural and Archaeological Resources

OAR 345-022-0090

17 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate,*
18 *the Council must find that the construction and operation of the facility, taking*
19 *into account mitigation, are not likely to result in significant adverse impacts to:*
20

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

23 *(b) For a facility on private land, archaeological objects, as defined in ORS*
24 *358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and*

25 *(c) For a facility on public land, archaeological sites, as defined in ORS*
26 *358.905(1)(c).*

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

31 * * *

Related Conditions

32 In the *Final Order on the Application*, the Council reviewed cultural resource reports
33 on the areas where the LJIIA components would be located. The Council adopted Conditions
34 45, 46, 47 and 48 to safeguard cultural resources.²⁴⁶ These conditions would apply as well to
35 the LJIIB area.

²⁴⁴ *Final Order on the Application* (September 21, 2007), pp. 103-104.

²⁴⁵ Request for Amendment #1, Attachment 4 (Addendum to Leaning Juniper II Wind Power Facility Geology Analysis: Preliminary Geotechnical and Geological Reconnaissance Summary).

²⁴⁶ *Final Order on the Application* (September 21, 2007), pp. 105-106.

1 The certificate holder’s contractor, CH2M HILL, conducted cultural resource
2 investigations in the LJIIB area in February, April and May 2009.²⁴⁷ The study areas included
3 1,000-foot-wide corridors centered on preliminary alignments of the proposed LJIIB wind
4 turbines and other components and 60-foot-wide County road rights-of-way. CH2M HILL
5 consulted with the Oregon State Historic Preservation Office (SHPO) and with the Oregon
6 Historic Trail Advisory Council.

7 Baseline field surveys identified six historic sites, six historic isolates, one prehistoric
8 isolate and two standing structures. Only one historic site was considered potentially eligible
9 for listing on the National Register of Historic Places. The certificate holder proposed a
10 modification of Condition 48 to provide a 50-foot “no entry” buffer around the site during
11 construction of LJIIB. The Council modifies Condition 48 as described in Revision 16 at page
12 100.

13 Condition 45 requires pre-construction cultural resource surveys in any areas that
14 would be affected by construction of LJIIB that were not surveyed previously in 2004, 2005
15 and 2006 as described in the site certificate application. The condition ensures that
16 construction of LJIIB would not have any adverse impact on any newly-discovered cultural
17 resources in the area. The Council modifies Condition 45 as described in Revision 15 to
18 specify that it applies to the LJIIB area. The Council adopts Condition 102 as described in
19 Revision 34 to provide similar preconstruction surveys and protection of cultural resources in
20 the LJIIB area.

21 One presumed alignment of the Oregon Trail route crosses the northern part of the
22 LJIIB area. No intact, visible remnants of the Oregon Trail were found within the site
23 boundary. Nevertheless, the certificate holder proposed a new site certificate condition to
24 ensure avoidance of any intact physical evidence of the Oregon Trail that is discovered during
25 construction. The Council adopts Condition 103 as described in Revision 35 at page 109.

(c) Public Services

OAR 345-022-0110

26 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate,*
27 *the Council must find that the construction and operation of the facility, taking*
28 *into account mitigation, are not likely to result in significant adverse impact to the*
29 *ability of public and private providers within the analysis area described in the*
30 *project order to provide: sewers and sewage treatment, water, storm water*
31 *drainage, solid waste management, housing, traffic safety, police and fire*
32 *protection, health care and schools.*
33

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

38 * * *

²⁴⁷ Request for Amendment #1, Section 4, p. 42, and Attachment 8 (Addendum to the Cultural Resources Survey Report for the Leaning Juniper II Wind Power Facility, Gilliam County, Oregon).

Related Conditions

1 In the *Final Order on the Application*, the Council addressed the potential impacts of
2 construction and operation of the LJF on the ability of public and private providers within the
3 analysis area to provide public services.²⁴⁸ The Council’s previous findings are incorporated
4 herein by this reference. The Council adopted Conditions 36, 37, 38 and 96, which address
5 impacts to public services.

6 The analysis area that was addressed by the Council in the *Final Order on the*
7 *Application* addressed communities within 30 miles of the LJIIA site boundary. In May 2007,
8 the Council revised OAR 345-001-0010(57) and reduced the analysis area for impacts to
9 public services to address communities within 10 miles from the site boundary. Accordingly,
10 the proposed amendment does not increase the analysis area even though it enlarges the area
11 within the site boundary.

12 The proposed amendment does not increase the number of turbines that would be
13 authorized for construction at the LJF, although it may extend the construction period.²⁴⁹ If
14 Amendment #1 were approved, there would be no significant changes to the impacts of the
15 facility on sewers, sewage treatment or solid waste management during construction or
16 operation of the LJF. The maximum amount of water used during construction and operation
17 would be unchanged.²⁵⁰ Approval of Amendment #1 is not expected to have significantly
18 different effects on housing, police and fire protection, health care or schools, compared to the
19 anticipated effects discussed in the *Final Order on the Application*. The amendment request
20 does not significantly increase traffic volumes on nearby roads during construction and
21 operation compared to the anticipated traffic volumes during construction and operation of the
22 LJF as previously approved by the Council.²⁵¹

23 The certificate holder proposes a modification of Condition 37. Subsection (e) of the
24 condition requires the certificate holder to maintain at least one travel lane at all times so that
25 roads will not be closed to traffic because of construction vehicles. The certificate holder
26 believes that it might not be possible to maintain one open lane of travel at all times and in all
27 locations (especially at turns) when turbine component trucks are traveling to the site.²⁵² The
28 certificate holder requests that the subsection be modified to add the phrase “to the extent
29 reasonably possible.” The Council modifies Condition 37 as described in Revision 11 at page
30 97. The modified language of the Condition would require the certificate holder to maintain at
31 least one open lane of travel on public roads except in instances where this is impractical due
32 to safety considerations or other reasonable considerations.

(d) Waste Minimization

OAR 345-022-0120

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

²⁴⁸ *Final Order on the Application* (September 21, 2007), pp. 106-109.

²⁴⁹ Request for Amendment #1, Section 4, p. 48.

²⁵⁰ Request for Amendment #1, Section 4, p. 46, and Response to RAI, Summary of Modifications, p. 2.

²⁵¹ Request for Amendment #1, Section 4, p. 48.

²⁵² Request for Amendment #1, Section 4, p. 49.

1 (a) The applicant’s solid waste and wastewater plans are likely to minimize
2 generation of solid waste and wastewater in the construction and operation of the
3 facility, and when solid waste or wastewater is generated, to result in recycling
4 and reuse of such wastes;

5 (b) The applicant’s plans to manage the accumulation, storage, disposal and
6 transportation of waste generated by the construction and operation of the facility
7 are likely to result in minimal adverse impact on surrounding and adjacent areas.

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

Related Conditions

12 In the *Final Order on the Application*, the Council made findings and adopted site
13 certificate conditions regarding management of solid waste and wastewater likely to be
14 generated during the construction and operation of the LJF.²⁵³ The Council’s previous
15 findings are incorporated herein by this reference. The Council adopted Conditions 68, 69, 73,
16 77, 96, 98, 99 and 100 to address waste management concerns. Solid waste and wastewater
17 generated by construction and operation of the LJF including the LJIIB components are likely
18 to be similar to that generated by construction of the LJIIA components alone because the
19 amendment would not increase the number of turbines authorized for construction for the
20 facility as a whole. The Council finds that no changes to the site certificate conditions related
21 to the Waste Minimization Standard are needed.

V. OTHER APPLICABLE REGULATORY REQUIREMENTS: FINDINGS AND CONCLUSIONS

1. Requirements under Council Jurisdiction

22 Under ORS 469.503(3) and under the Council’s General Standard of Review (OAR
23 345-022-0000), the Council must determine that a facility complies with “all other Oregon
24 statutes and administrative rules identified in the project order, as amended, as applicable to
25 the issuance of a site certificate for the proposed facility.” Other Oregon statutes and
26 administrative rules that are applicable to the changes requested in Amendment #1 include the
27 Department of Environmental Quality (DEQ) noise control regulations, the regulations
28 adopted by the Department of State Lands (DSL) for removal or fill of material affecting
29 waters of the state, the Water Resources Department’s (WRD) regulations for appropriating
30 ground water and the Council’s statutory authority to consider protection of public health and
31 safety.

(a) Noise Control Regulations

32 The applicable noise control regulations are as follows:

²⁵³ *Final Order on the Application* (September 21, 2007), pp. 109-112.

1 **OAR 340-035-0035**
2 **Noise Control Regulations for Industry and Commerce**

3 *(1) Standards and Regulations:*

4 * * *

5 *(b) New Noise Sources:*

6 * * *

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

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

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

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

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

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

33 *(III) The noise levels from a wind energy facility may increase the ambient*
34 *statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits*
35 *specified in Table 8), if the person who owns the noise sensitive property executes*
36 *a legally effective easement or real covenant that benefits the property on which*
37 *the wind energy facility is located. The easement or covenant must authorize the*
38 *wind energy facility to increase the ambient statistical noise levels, L10 or L50 on*
39 *the sensitive property by more than 10 dBA at the appropriate measurement point.*

40 *(IV) For purposes of determining whether a proposed wind energy facility*
41 *would satisfy the ambient noise standard where a landowner has not waived the*
42 *standard, noise levels at the appropriate measurement point are predicted*
43 *assuming that all of the proposed wind facility’s turbines are operating between*

1 *cut-in speed and the wind speed corresponding to the maximum sound power level*
2 *established by IEC 61400-11 (version 2002-12). These predictions must be*
3 *compared to the highest of either the assumed ambient noise level of 26 dBA or to*
4 *the actual ambient background L10 and L50 noise level, if measured. The facility*
5 *complies with the noise ambient background standard if this comparison shows*
6 *that the increase in noise is not more than 10 dBA over this entire range of wind*
7 *speeds.*

8 (V) *For purposes of determining whether an operating wind energy facility*
9 *complies with the ambient noise standard where a landowner has not waived the*
10 *standard, noise levels at the appropriate measurement point are measured when*
11 *the facility's nearest wind turbine is operating over the entire range of wind*
12 *speeds between cut-in speed and the windspeed corresponding to the maximum*
13 *sound power level and no turbine that could contribute to the noise level is*
14 *disabled. The facility complies with the noise ambient background standard if the*
15 *increase in noise over either the assumed ambient noise level of 26 dBA or to the*
16 *actual ambient background L10 and L50 noise level, if measured, is not more than*
17 *10 dBA over this entire range of wind speeds.*

18 (VI) *For purposes of determining whether a proposed wind energy facility*
19 *would satisfy the Table 8 standards, noise levels at the appropriate measurement*
20 *point are predicted by using the turbine's maximum sound power level following*
21 *procedures established by IEC 61400-11 (version 2002-12), and assuming that all*
22 *of the proposed wind facility's turbines are operating at the maximum sound*
23 *power level.*

24 (VII) *For purposes of determining whether an operating wind energy facility*
25 *satisfies the Table 8 standards, noise generated by the energy facility is measured*
26 *at the appropriate measurement point when the facility's nearest wind turbine is*
27 *operating at the windspeed corresponding to the maximum sound power level and*
28 *no turbine that could contribute to the noise level is disabled.*

29 * * *

Findings of Fact

30 In the *Final Order on the Application*, the Council concluded that the LJF would
31 comply with the applicable noise control regulations.²⁵⁴ Amendment #1 would change the site
32 boundary of the LJF and authorize the construction of wind turbines and related components
33 in the LJIIB area. The amendment request does not seek to change the maximum number of
34 turbines, the maximum generating capacity or the range of turbine types or sizes previously
35 authorized under the site certificate. The Council must decide whether the noise generated by
36 the operation of the LJF within the expanded site boundary would comply with the noise
37 control regulations.²⁵⁵ In Oregon, noise is subject to regulation “to provide protection of the
38 health, safety and welfare of Oregon citizens from the hazards and deterioration of the quality
39 of life imposed by excessive noise emissions.”²⁵⁶ The regulations impose different limits on

²⁵⁴ *Final Order on the Application* (September 21, 2007), pp. 112-117.

²⁵⁵ OAR 340-035-0035(5)(g) exempts noise generated by construction activities.

²⁵⁶ ORS 467.010.

1 new noise sources constructed on a “previously unused industrial or commercial site”
2 compared to the limits imposed on new sources constructed on a “previously used industrial
3 or commercial site.” A site is considered a “previously unused industrial or commercial site”
4 if the site has not been used by any industrial or commercial noise source at any time during
5 the 20 years preceding the construction of a new source on the site.²⁵⁷ The Council finds that
6 the LJIIB area is a “previously unused industrial or commercial site.” The applicable noise
7 standard is OAR 340-035-0035(1)(b)(B), which applies to a new industrial or commercial
8 noise source located on a previously unused site.²⁵⁸

9 Under the regulations, the noise from the facility must comply with two tests. The
10 noise must not exceed the maximum allowable limit of 50 dBA (the maximum allowable test)
11 and must not increase ambient noise levels by more than 10 dBA at any noise sensitive
12 property (the ambient degradation test).²⁵⁹ OAR 340-035-0035(1)(b)(B)(iii)(III) relieves the
13 certificate holder from having to show compliance with the ambient degradation test “if the
14 person who owns the noise sensitive property executes a legally effective easement or real
15 covenant that benefits the property on which the wind energy facility is located” (a “noise
16 waiver”).

17 The certificate holder provided information about compliance with the noise
18 regulations in the Request for Amendment #1, Attachment 10, and in response to the
19 Department’s requests for additional information.²⁶⁰ CH2M HILL conducted a noise analysis
20 for the certificate holder based on a proposed layout of 43 Suzlon 2.1-MW wind turbines in
21 the LJIIA area and, for the LJIIB area, both a minimum turbine layout (62 Vestas 3.0-MW
22 wind turbines) and a maximum turbine layout (90 GE 1.5-MW turbines). The certificate
23 holder desires flexibility as to the final turbine selection and turbine locations within the
24 micro-siting areas. Without knowing the turbine type, the number of turbines in each string,
25 the spacing between turbines and their precise locations, the analysis necessary to determine
26 whether the facility, as built, will comply with the noise regulations cannot be completed. The
27 procedures for conducting the analysis are described in OAR 340-035-0035(1)(b)(B)(iii)(IV)
28 and (VI).

29 For the purpose of analyzing whether the LJF could be designed to comply with the
30 noise control regulations if Amendment #1 were approved, CH2M HILL increased the

²⁵⁷ OAR 340-035-0015(47) defines “previously unused industrial or commercial site.” Agricultural activities are specifically excluded from this definition.

²⁵⁸ OAR 340-035-0015(33) defines a “new industrial or commercial noise source” as “any industrial or commercial noise source for which installation or construction was commenced after January 1, 1975 on a site not previously occupied by the industrial or commercial noise source in question.”

²⁵⁹ The “maximum allowable” limit is 50 dBA based on Table 8, which is referenced in the DEQ regulations. The Table 8 limits are shown in the *Final Order on the Application* (September 21, 2007), p. 115. In this discussion, “dBA” refers to sound levels in decibels as measured on a sound level meter using the A-weighted filter network, which corresponds closely to the frequency response of the human ear. The regulation applies the test “as measured at an appropriate measurement point.” The “appropriate measurement point,” as defined by OAR 340-035-0015(3), is “25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source” or “that point on the noise sensitive property line nearest the noise source,” whichever is farther from the source. OAR 340-035-0015(38) defines “noise sensitive property” as “real property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries.” Private residences are the only “noise sensitive properties” potentially affected by the LJF. We refer to these as the “noise sensitive receivers.”

²⁶⁰ Response to RAI (table), pp. 4-5, and Attachment D.

1 reported maximum sound power levels of the reference turbine types by 2 dBA to account for
 2 the manufacturers’ typical warranty information, which indicates an uncertainty band of +\ 2
 3 dBA in the stated maximum sound power level.²⁶¹ Accordingly, CH2M HILL assumed that
 4 the 1.5-MW and 2.1-MW turbines would have a maximum sound power level of 106 dBA
 5 and the 3.0-MW turbines would have a maximum sound power level of 112 dBA.²⁶² For
 6 predicting the noise that would be generated by substation transformers, CH2M HILL
 7 assumed an overall maximum sound power level of 107 dBA.²⁶³ CH2M HILL predicted noise
 8 levels using the CADNA/A computer model by Datakustik GmbH of Munich, Germany. The
 9 program uses sound propagation factors adopted from ISO 9613 (ISO 1993) and VDI 2714
 10 (VDI, 1988). The analysis assumed atmospheric absorption for conditions of 10° C and 70
 11 percent relative humidity, and it included ground attenuation predicted using the “Alternative
 12 Method” specified in the ISO standard.

13 To support a Council finding that the facility could be built in a way that complies
 14 with the applicable noise regulations, the certificate holder provided two “noise-compliant”
 15 layouts. In both layouts, there are 43 2.1-MW turbines in the LJIIA area, but one layout
 16 includes 90 1.5-MW turbines in the LJIIB area and the other layout includes 62 3.0-MW
 17 turbines in the LJIIB area. CH2M HILL’s analysis included noise contour maps based on the
 18 two noise-compliant layouts.²⁶⁴

19 The noise contour maps show that there would be no noise-sensitive receivers
 20 (residences) inside the 50-dBA contour lines. That is, noise levels would not exceed 50 dBA
 21 at any residence under either layout.²⁶⁵ Therefore, these layouts would comply with the
 22 “maximum allowable” test.

23 The noise contour maps show that there would be some noise-sensitive receivers
 24 inside the 36 dBA contour lines and other residences near, but just outside, the lines. In the
 25 maximum turbine layout (90 1.5-MW turbines in the LJIIB area), there would be nine
 26 receivers where the predicted noise levels would exceed the 36-dBA ambient degradation
 27 limit. Table 9 below lists all receivers where the predicted noise level is 35 dBA or above.²⁶⁶
 28 Receivers where the predicted noise levels would exceed the ambient degradation limit are
 29 shown in boldface.

Table 9: Predicted Noise Levels (90 1.5-MW LJIIB Turbines)

Receiver	Predicted Maximum Hourly L₅₀ Noise Level (dBA)
R001	37
R002	35
R003	35

²⁶¹ The manufacturers’ warranted sound power levels are 104 dBA for the GE 1.5-MW turbines, 104 dBA for the Suzlon 2.1-MW turbines and 110 dBA for the Vestas 3.0-MW turbines.

²⁶² Leaning Juniper II Wind Power Facility Site Certificate Application, Exhibit X, Table X-10 and Response to RAI, Attachment E.

²⁶³ Leaning Juniper II Wind Power Facility Site Certificate Application, Exhibit X, Table X-10.

²⁶⁴ Response to RAI, Attachment D, Figures 1 and 2.

²⁶⁵ Response to RAI, Attachment D, Figures 1 and 2.

²⁶⁶ Based on the Request for Amendment #1, Attachment 10, Table 2, and additional data provided by the certificate holder.

R004	35
R005	39
R006	43
R008	38
R009	37
R011	35
R012	36
R019	35
R021	35
R084	35
R268	35
R269	42
R270	35
R274	50
R277	45
R279	35
R282	36
R283	35
R284	35
R286	42

1 In the minimum turbine layout (62 3.0-MW turbines in the LJIIB area), there would be
2 18 receivers where the predicted noise levels would exceed 36 dBA. These residences are
3 shown in boldface in Table 10 below.²⁶⁷ Under either layout, the certificate holder would need
4 to obtain noise waivers from the owners of the residences where the ambient noise
5 degradation limit would be exceeded or would need to redesign the layout to reduce the noise
6 levels at residences where no waiver could be obtained.

Table 10: Predicted Noise Levels (62 3.0-MW LJIIB Turbines)

Receiver	Predicted Maximum Hourly L₅₀ Noise Level (dBA)
R001	37
R002	36
R003	36
R004	36
R005	43
R006	47
R008	38
R009	37

²⁶⁷ Based on the Request for Amendment #1, Attachment 10, Table 3, and additional data provided by the certificate holder.

R011	35
R012	36
R268	40
R019	35
R021	35
R084	35
R269	46
R270	40
R271	38
R274	48
R277	47
R278	36
R279	39
R280	39
R281	39
R282	41
R283	40
R284	40
R286	46
R288	35

1 Condition 94 requires the certificate holder to demonstrate to the satisfaction of the
2 Department that the facility as built according to the final design layout would comply with
3 the applicable noise control regulations. The condition requires the certificate holder to
4 provide information about the turbine type selected for construction and about the final design
5 location for each turbine. The condition requires the certificate holder to provide a noise
6 analysis to demonstrate to the satisfaction of the Department that the final design of the
7 facility would comply with the applicable noise control regulations. The Council modifies
8 Condition 94 to require that a noise analysis applicable to any phase of the facility be
9 performed before beginning construction of that phase.

10 Condition 93 requires the certificate holder to confine the noisiest construction
11 activities to the daylight hours and to establish a noise complaint response system to address
12 any noise complaints during construction.

13 Under OAR 340-035-0035(4)(a), DEQ has authority to require the owner of an
14 operating noise source to monitor and record the statistical noise levels upon written
15 notification. In the event of a complaint regarding noise levels during operation of the LJF,
16 the Council has the authority to act in the place of DEQ to enforce this provision to verify that
17 the certificate holder is operating the facility in compliance with the noise control regulations.
18 Under Condition 2, the certificate holder is required to operate the facility in accordance with
19 all applicable state laws and administrative rules. Condition 95 requires the certificate holder
20 to maintain a noise complaint response system during facility operation and to notify the

1 Department of any complaints received about noise from the facility as well as the actions
2 taken to address them.

Conclusions of Law

3 For the reasons discussed above and subject to the site certificate conditions described
4 herein, the Council concludes that the LJF would comply with the applicable noise control
5 regulations in OAR 340-035-0035 if Amendment #1 were approved.

(b) Removal-Fill Law

6 The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and regulations (OAR
7 141-085-0500 through 141-085-0785) adopted by the Department of State Lands (DSL)
8 require a permit if 50 cubic yards or more of material is removed, filled or altered within any
9 “waters of the state” at the proposed site.²⁶⁸ The Council must determine whether a permit is
10 needed and should be issued. The U.S. Army Corps of Engineers administers Section 404 of
11 the Clean Water Act, which regulates the discharge of fill into waters of the United States
12 (including wetlands), and Section 10 of the Rivers and Harbors Appropriation Act of 1899,
13 which regulates placement of fill in navigable waters. Federal law may require a Nationwide
14 or Individual fill permit for the proposed facility if waters of the United States are affected. A
15 single application form (a Joint Permit Application Form) is used to apply for both the State
16 and federal permits.

Findings of Fact

17 In the *Final Order on the Application*, the Council found that a Removal/Fill Permit
18 would be needed for construction of the LJF and approved the issuance of the permit, subject
19 to the requirements of Condition 72.²⁶⁹ A draft permit, including the permit conditions
20 recommended by DSL, was attached to the *Final Order* as Attachment F.

21 The applicant’s contractor, CH2M HILL, conducted field investigation for wetlands
22 and waters in the LJIIB area in April 2009.²⁷⁰ The study areas included 1,000-foot-wide
23 corridors centered on preliminary alignments of the proposed LJIIB wind turbines and other
24 components. Additional areas studied included the 60-foot road rights-of-way along Berthold
25 Road, Montague Lane and Weatherford Road and the transmission route easement area
26 through the existing Leaning Juniper I Wind Project owned by PacifiCorp. CH2M HILL
27 prepared a revision to the wetland and waters delineation report, based on the revised
28 configuration of the LJIIB components.²⁷¹

29 CH2M HILL identified one potentially State jurisdictional wetland (W8) in the study
30 area and six ephemeral stream channels in the LJIIB area.²⁷² DSL reviewed the delineation

²⁶⁸ ORS 196.800(14) defines “Waters of this state.” The term includes wetlands and certain other water bodies.

²⁶⁹ *Final Order on the Application* (September 21, 2007), p. 126.

²⁷⁰ Request for Amendment #1, Attachment 11 (“Addendum to Leaning Juniper II Wind Power Facility Wetlands and Waters Delineation Report, Gilliam County Oregon” (June 8, 2009)).

²⁷¹ The revised configuration is shown in revised Figures 2 and 3 (Response to RAI, Attachment C). CH2M HILL’s revised delineation report is titled “Addendum to Leaning Juniper II Wind Power Facility Wetlands and Waters Delineation Report, Gilliam County Oregon (September 24, 2009)” and was received by the Department as an attachment to a letter from Joel Shaich, CH2M HILL, September 28, 2009.

²⁷² Request for Amendment #1, Attachment 11 (“Addendum to Leaning Juniper II Wind Power Facility Wetlands and Waters Delineation Report, Gilliam County Oregon” (June 8, 2009)), p. 8.

1 report and determined that the identified wetland is jurisdictional and subject to the
2 Removal/Fill law.²⁷³ DSL determined that the six ephemeral streams (waterways) in the LJIIB
3 area are not jurisdictional, because they do not meet the definition of an intermittent stream as
4 defined in OAR 141-085-0510(41). One waterway (S27) previously identified in the LJIIA
5 area is jurisdictional. The Council addressed S27 in the *Final Order on the Application* and
6 determined that a Removal/Fill Permit is required for a proposed culvert and crossing of the
7 waterway.²⁷⁴

8 The certificate holder proposes a modification of Condition 72 to require avoidance of
9 any disturbance of the wetland area identified as W8. The Council adopts this modification as
10 described in Revision 19. Construction of LJIIB access roads and underground collector lines
11 and improvements to Montague Lane could result in impacts to each of the six identified non-
12 jurisdictional stream channels. Some of the potential impacts to ephemeral streams were
13 eliminated under the revised layout, but the remaining impacts include three road crossings
14 and two underground collector line crossings.²⁷⁵

15 Under Condition 72, the certificate holder is required to conduct a pre-construction
16 field investigation based on the final design layout of the facility if construction would occur
17 in any locations not previously investigated. The condition requires that there be no impact on
18 any jurisdictional water identified in the pre-construction investigation.²⁷⁶

Conclusions of Law

19 For the reasons discussed above, the Council concludes that a Removal/Fill Permit
20 would be required for construction of the LJIIA components, as discussed in the *Final Order*
21 *on the Application*. The Council concludes that a new or amended Removal/Fill permit would
22 not be required for construction of the LJIIB components if Amendment #1 were approved.

(c) Ground Water Act

23 Through the provisions of the Ground Water Act of 1955, ORS 537.505 to ORS
24 537.796, and OAR Chapter 690, the Oregon Water Resources Commission administers the
25 rights of appropriation and use of the ground water resources of the state. Under OAR 345-
26 022-0000(1), the Council must determine whether the LJF, including the expansion proposed
27 by Amendment #1, complies with these statutes and administrative rules.

Findings of Fact

28 In the *Final Order on the Application*, the Council found the total amount of water
29 that would be needed for facility construction (approximately 35 million gallons) could be
30 obtained from the City of Arlington.²⁷⁷ This finding demonstrates that sufficient water is
31 available from a source for which there is an existing water right under which construction
32 water could be provided to the facility. The finding does not require that the certificate holder

²⁷³ Letter from Peter Ryan, DSL, September 29, 2009 (Response to Additional RAI, Attachment 5).

²⁷⁴ *Final Order on the Application* (September 21, 2007), p. 126.

²⁷⁵ Response to RAI, Summary of Modifications, p. 2.

²⁷⁶ CH2M HILL conducted a pre-construction survey of the LJIIA area and identified one potentially jurisdictional wetland (W7) (“Preconstruction Survey Addendum to the Wetlands and Waters Delineation Report for the Leaning Juniper II Wind Power Facility--LJIIA, Gilliam County, Oregon” (September 24, 2009)). Construction of LJIIA based on the final design configuration would have no impact on the wetland.

²⁷⁷ *Final Order on the Application* (September 21, 2007), p. 127.

1 obtain water exclusively from that source.²⁷⁸ The Council found that, during operation, water
2 would be used at the O&M buildings primarily for incidental uses and, if necessary, for
3 turbine blade washing. Water for operational uses would be supplied from one or more on-site
4 wells and would not exceed 5,000 gallons per day (Condition 76). ORS 537.545(1)(f)
5 provides that a new water right is not required for industrial and commercial uses of up to
6 5,000 gallons per day.²⁷⁹

7 In the Request for Amendment #1, the certificate holder estimates that the total
8 amount of water needed for construction of LJIIA would be up to 17 million gallons and that
9 the total amount of water needed for construction of LJIB would be up to 17.7 million
10 gallons.²⁸⁰ The amendment would not authorize construction of any additional O&M
11 buildings or water wells, and water use during facility operations would not exceed 5,000
12 gallons per day. The Council finds that approval of the amendment request would not increase
13 the maximum amount of water expected to be used during construction and operation of the
14 LJF.

Conclusions of Law

15 Based on the findings discussed above and subject to the site certificate conditions
16 discussed herein, the Council concludes that the LJF would comply with applicable
17 regulations pertaining to appropriation and use of water resources if Amendment #1 were
18 approved.

(d) State Highway Access and Crossings

19 Under OAR Chapter 734, Division 55, the Oregon Department of Transportation
20 (ODOT) regulates the location, installation, construction, maintenance and use of utility
21 structures, including buried cables, within State Highway right-of-way. Under Division 51,
22 ODOT regulates highway approaches and access control.

Findings of Fact

23 In the Request for Amendment #1, the certificate holder explains that State Highway
24 approach permits might be required by ODOT for Weatherford Road, Montague Lane and
25 two proposed new private access roads.²⁸¹ In addition, multiple State Highway utility
26 crossings might be needed for overhead as well as underground transmission line or collector
27 line crossings of State Highway 19.

28 The Department asked the certificate holder to contact ODOT to obtain written
29 confirmation regarding which permits would be needed, for what purposes and at what
30 locations as well as confirmation that any permits issued by ODOT would be subject only to
31 conditions limited by OAR Chapter 734, Divisions 51 and 55. The certificate holder contacted
32 ODOT and reported to the Department that ODOT staff requested a site visit to confirm
33 specific permit requirements for LJIB.²⁸² ODOT staff visited the site on October 7.²⁸³ The

²⁷⁸ Other sources of water might be used if appropriate water rights exist, consistent with Condition 3.

²⁷⁹ SB 788 (2009) amended ORS 537.545 to require the owner of land on which an exempt well is drilled to provide a map to WRD showing the exact location of the well and to file the exempt water use with WRD for recording with submittal of a fee.

²⁸⁰ Request for Amendment #1, Section 4, pp. 46-47, and Response to RAI, Summary of Modifications, p. 2.

²⁸¹ Request for Amendment #1, Section 4, p. 57.

²⁸² Response to RAI (table), p. 18 (response to Request #15).

1 certificate holder reported that ODOT staff had given verbal confirmation that any permits
2 issued would be subject only to conditions limited by OAR Chapter 734, Divisions 51 and 55.
3 The Department understands, based on experience, that ODOT staff cannot determine specific
4 permit conditions without reviewing detailed design drawings, which the certificate holder
5 cannot provide until final facility design decisions have been made.

6 The Council finds that ODOT permits for utility crossings and State Highway
7 approaches would be needed for components that would be added to the facility under
8 Amendment #1. The Council finds that the permits should be issued, subject to conditions
9 imposed by ODOT but limited by OAR Chapter 734, Divisions 51 and 55. The Council
10 adopts Condition 104 to address these requirements, as discussed below in Revision 36 at
11 page 110.

Conclusions of Law

12 Based on the findings discussed above and subject to the site certificate conditions
13 discussed herein, the Council concludes that the LJF would comply with requirements for
14 State Highway access and crossings if Amendment #1 were approved.

(e) Public Health and Safety

15 Under ORS 469.310, the Council is charged with ensuring that the “siting,
16 construction and operation of energy facilities shall be accomplished in a manner consistent
17 with protection of the public health and safety...” State law further provides that “the site
18 certificate shall contain conditions for the protection of the public health and safety...” ORS
19 469.401(2).

Findings of Fact

20 We discuss the Council’s Public Health and Safety Standards for Wind Energy
21 Facilities above at page 55. In this section below, we discuss the issues of fire protection,
22 magnetic fields and coordination with the Oregon Public Utility Commission.

A. Fire Protection

23 In the *Final Order on the Application*, the Council made findings and adopted
24 conditions regarding fire prevention and response for the LJF.²⁸⁴ The fire risks for the LJIB
25 area are similar to the risks previously considered by the Council for the LJIA area.
26 Applicable conditions include Conditions 58, 60, 61, 62, 63, 64, 65 and 66.

B. Magnetic Fields

27 Electric transmission lines create both electric and magnetic fields. The electric fields
28 associated with the proposed transmission lines are addressed above at page 59.

29 In the *Final Order on the Application*, the Council concluded that there would not be a
30 significant risk to public health and safety from the magnetic field generated by the
31 underground or aboveground 34.5-kV collector system.²⁸⁵ Because the 230-kV
32 interconnection line for LJIA would be entirely within a fenced area and inaccessible to the

²⁸³ Email from Patrick Smith, ODOT, forwarded by Jeffrey Durocher, October 12, 2009.

²⁸⁴ *Final Order on the Application* (September 21, 2007), pp. 128-129.

²⁸⁵ *Final Order on the Application* (September 21, 2007), p. 130.

1 public (and because the adjacent facility substation and Leaning Juniper I substation would
2 obscure any electromagnetic fields generated by the 230-kV line), the Council found that the
3 magnetic field generated by the interconnection line would not result in any significant risk to
4 public health and safety.²⁸⁶

5 In the Request for Amendment #1, the certificate holder analyzed the electric and
6 magnetic fields associated with the two transmission options proposed to carry power
7 generated by the LJIIB turbines to the LJIIA substation located near the Jones Canyon
8 Switching Station. One option would consist of two aboveground double-circuit 34.5-kV lines
9 running parallel to each other from the LJIIB area to the LJIIA substation. The other option
10 would consist of a 230-kV aboveground transmission line to carry the power from a new
11 LJIIB substation to the LJIIA substation.

12 The strength of a magnetic field fluctuates hourly and daily with changes in the
13 amount of current in the transmission line caused by the electrical load. Magnetic field
14 strength is measured in units of milligauss (mG). Using a computer-modeling analysis, the
15 certificate holder calculated the magnetic fields produced by the two transmission options. For
16 the parallel 34.5-kV line option, the calculated maximum magnetic field strength is 45.31 mG,
17 and for the 230-kV line option, the calculated maximum magnetic field strength is 94.37
18 mG.²⁸⁷ There are no residences within 200 feet of either side of the centerline of the proposed
19 routes for either transmission option.

20 Due to the absence of scientific consensus regarding the possible health effects of
21 exposure to magnetic fields, there is no Oregon standard limiting the allowable magnetic field
22 strength associated with transmission lines.²⁸⁸ The Council has encouraged applicants to
23 practice “prudent avoidance” and to implement low-cost ways to reduce or manage public
24 exposure to magnetic fields from transmission lines under the Council’s jurisdiction.
25 Condition 81 addresses prudent avoidance measures to reduce human exposure to magnetic
26 fields.

C. Coordination with the PUC

27 The Oregon Public Utility Commission Safety and Reliability Section (PUC) has
28 requested that the Council ensure that certificate holders coordinate with PUC staff on the
29 design and specifications of electrical transmission lines and natural gas pipelines. The PUC
30 has explained that others in the past have made inadvertent, but costly, mistakes in the design
31 and specifications of power lines and pipelines that could have easily been corrected early if
32 the developer had consulted with the PUC staff responsible for the safety codes and standards.
33 Condition 79 requires the certificate holder to coordinate the design of electric transmission
34 lines with the PUC.

²⁸⁶ *Final Order on the Application* (September 21, 2007), p. 130.

²⁸⁷ Request for Amendment #1, Attachment 9 (Addendum to Leaning Juniper II Wind Power Facility Exhibit AA Electromagnetic Field Analysis), p. 6 and p. 9.

²⁸⁸ A recent discussion of magnetic field effects is included in the *Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), pp. 139-141.

Conclusions of Law

1 Based on the findings discussed above and subject to the site certificate conditions
2 discussed herein, the Council concludes that the LJF would comply with requirements to
3 protect public health and safety if Amendment #1 were approved.

2. Requirements That Are Not Under Council Jurisdiction

(a) Federally-Delegated Programs

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

10 As required under Condition 70, the certificate holder would conduct all construction
11 work in compliance with an Erosion and Sediment Control Plan satisfactory to the Oregon
12 Department of Environmental Quality and as required under the federally-delegated National
13 Pollutant Discharge Elimination System Storm Water Discharge General Permit #1200-C.

(b) Requirements That Do Not Relate to Siting

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

VI. GENERAL APPLICATION OF CONDITIONS

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

30 In addition to all other conditions referenced or included in this order, the site
31 certificate holder is subject to all conditions and requirements contained in the rules of the
32 Council and in local ordinances and state law in effect on the date the amended site certificate
33 is executed.²⁸⁹ Under ORS 469.401(2), upon a clear showing of a significant threat to the

²⁸⁹ With regard to land use, the applicable local criteria are those in effect on the date the certificate holder submitted the request for amendment.

1 public health, safety or the environment that requires application of later-adopted laws or
2 rules, the Council may require compliance with such later-adopted laws or rules.

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

VII. GENERAL CONCLUSION

7 The proposed amendment would expand the site boundary of the LJF. The amendment
8 would add approximately 7,962 acres to the site and would authorize the construction and
9 operation of up to 84 wind turbines and related infrastructure within the new area. The
10 amendment would extend the deadline for completion of facility construction to September
11 24, 2013. The Council adopts revisions to the site certificate as described in the section that
12 follows.

13 Based on the findings and conclusions discussed above regarding the proposed
14 amendment, the Council makes the following findings:

- 15 1. The proposed Amendment #1 complies with the requirements of the Oregon
16 Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to
17 469.619.
- 18 2. The proposed Amendment #1 complies with the applicable standards adopted by
19 the Council pursuant to ORS 469.501.
- 20 3. The proposed Amendment #1 complies with all other Oregon statutes and
21 administrative rules applicable to the amendment of the site certificate for the LJF
22 that are within the Council’s jurisdiction.

23 Accordingly, the Council finds that the facility complies with the General Standard of
24 Review (OAR 345-022-0000). The Council concludes, based on a preponderance of the
25 evidence in the record, that the site certificate may be amended as requested by the certificate
26 holder, subject to the revisions recommended by the Department and set forth below.

1. The Department’s Recommended Revisions

27 New text proposed by the Department is shown with single underline. New text
28 proposed by the certificate holder with concurrence by the Department is shown with double
29 underline. Text proposed by the certificate holder but not recommended by the Department is
30 not shown.²⁹⁰ Deletions are shown with a strikethrough. The parenthetical references in
31 square brackets follow standard practice and provide a historical reference of when changes
32 were made to the site certificate. Page references are to the *Site Certificate for the Leaning*
33 *Juniper II Wind Power Facility* (September 21, 2007).

²⁹⁰ All changes to the site certificate proposed by the certificate holder are shown in a red-line markup of the Site Certificate included in the Request for Amendment #1 as Attachment 2.

Revision 1

1 *Page 1, lines 6-11:*

2 The findings of fact, reasoning and conclusions of law underlying the terms and conditions of
3 this site certificate are set forth in the following documents, incorporated herein by this
4 reference: (a) the Council’s Final Order on the Application for the facility issued on
5 September 21, 2007, and (b) the Council’s Final Order on Amendment #1~~incorporated herein~~
6 ~~by this reference~~. In interpreting this site certificate, any ambiguity will be clarified by
7 reference to the following, in order of priority: (1) this Amended Site Certificate, (2) the Final
8 Order on Amendment #1, (3) the Final Order on the Application and (34) the record of the
9 proceedings that led to the Final Orders on the Application and Amendment #1. [Amendment
10 #1]

Revision 1 Explanation

11 This revision adds a reference in the site certificate to the findings of fact, reasoning
12 and conclusions in support of the present amendment. The revision establishes the order of
13 priority in which the underlying documents should be considered in resolving any ambiguity.

Revision 2

14 *Page 1, lines 22-28:*

15 3. This site certificate does not address, and is not binding with respect to, matters that were
16 not addressed in the Council’s Final Orders on the Application and Amendment #1~~for the~~
17 ~~facility~~. Such matters include, but are not limited to: building code compliance, wage,
18 hour and other labor regulations, local government fees and charges and other design or
19 operational issues that do not relate to siting the facility (ORS 469.401(4)) and permits
20 issued under statutes and rules for which the decision on compliance has been delegated
21 by the federal government to a state agency other than the Council. 469.503(3).
22 [Amendment #1]

Revision 2 Explanation

23 This revision adds the matters addressed in the Final Order on Amendment #1 to the
24 scope of matters addressed in the site certificate.

Revision 3

25 *Page 2, lines 20-25:*

26 The energy facility is an electric power generating plant with an average electric generating
27 capacity of approximately ~~9392~~ megawatts and a peak generating capacity of not more than
28 ~~279~~ 277 megawatts that produces power from wind energy. The facility consists of not more
29 than ~~133~~ 127 wind turbines. The maximum peak generating capacity of each turbine is not
30 more than 3.0 megawatts. The energy facility is described further in the Final Orders on the
31 Application and Amendment #1~~on the facility~~. [Amendment #1]

Revision 3 Explanation

32 This revision incorporates the facility description contained in the *Final Order on*
33 *Amendment #1*. The revision reduces the maximum number of wind turbines from 133 to 127
34 and reduces the peak generating capacity to “not more than 277 megawatts.” As described at
35 page 6, the peak generating capacity of the facility would not exceed 276.3 MW (an average
36 generating capacity of 92.1 MW).

Revision 4

1 *Page 3, lines 7-11:*

2 The facility includes a substation located ~~adjacent to~~ near the Bonneville Power Administration
3 (BPA) Jones Canyon Switching Station. An aboveground transmission line less than 400 feet
4 in length carries the power from the substation to a BPA switching station and an
5 interconnection with the regional transmission grid through BPA's McNary-Santiam 230-kV
6 transmission line. The facility may include a second substation located within the area added
7 to the facility by Amendment #1 (LJIIB) and a 230-kV transmission line to carry power from
8 the second substation to the facility substation located near the Jones Canyon Switching
9 Station. Alternatively, the facility may include two parallel double-circuit 34.5-kV lines to
10 carry power from the LJIIB area to the facility substation. [Amendment #1]

Revision 4 Explanation

11 This revision adds a description of the optional second substation in the LJIIB area
12 and a description of the optional 230-kV transmission line to carry power from the LJIIB area
13 to the previously-approved facility substation located near the Jones Canyon Switching
14 Station. As an alternative to the second substation and 230-kV transmission line, the revision
15 allows for parallel 34.5-kV transmission lines to carry power from the LJIIB area to the
16 previously-approved facility substation.

Revision 5

17 *Page 3, lines 29-31:*

18 The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in
19 Townships 1_2 and 3 North and Ranges 20, 21 and ~~21~~22 East. The facility is located on land
20 subject to lease agreements with landowners. [Amendment #1]

Revision 5 Explanation

21 This revision modifies the location description to include the area added to the facility
22 by Amendment #1.

Revision 6

23 *Page 9, lines 34-38:*

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

Revision 6 Explanation

30 The original site certificate became effective upon execution by the Council and by the
31 applicant (OAR 345-015-0085(8)), which was September 24, 2007. This revision modifies
32 Condition 25 to specify a date certain as the deadline for beginning construction. The revision
33 does not change the deadline previously adopted by the Council.

Revision 7

Page 9, lines 39-40, and page 10, lines 1-7:

26. The certificate holder shall complete construction of the facility ~~within four years after the effective date of the site certificate~~ by September 24, 2013. Construction is complete when: 1) the facility is substantially complete as defined by the certificate holder’s construction contract documents, 2) acceptance testing has been satisfactorily completed and 3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendment #1]

Revision 7 Explanation

This revision modifies Condition 26 to specify a date certain as the deadline for completing construction of the facility (including LJIIA and LJIIB components). The revision extends the construction completion deadline by two years.

Revision 8

Page 10, lines 8-19:

27. The certificate holder shall construct a facility substantially as described in the site certificate and may select turbines of any type, subject to the following restrictions:
(a) The total number of turbines at the facility must not exceed ~~433~~127 turbines.
(b) The peak generating capacity of each turbine must not exceed 3.0 megawatts.
(c) The combined peak generating capacity of the facility must not exceed ~~279~~277 megawatts.
(d) The turbine hub height must not exceed 100 meters, and the turbine blade tip height must not exceed 150 meters.
(e) The minimum blade tip clearance must be 30 meters above ground.
(f) The certificate holder shall request an amendment of the site certificate to increase the combined peak generating capacity of the facility or to increase the number of wind turbines or the dimensions of wind turbines at the facility.
[Amendment #1]

Revision 8 Explanation

This revision modifies Condition 27 according to the certificate holder’s statements regarding the total number of turbines planned for construction in the LJIIA area (43 2.1-MW turbines) and the proposed maximum number of turbines (84) and maximum peak generating capacity (186 MW) in the LJIIB area.

Revision 9

Page 10, lines 27-45, and page 11, lines 1-17:

30. Before beginning construction of the LJIIA components as described in the *Final Order on Amendment #1*, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount is \$8.847 million (in 2006 dollars), adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate

1 holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter
2 as described in (b).

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

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

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

19 (ii) Add 1 percent of the adjusted ~~gross cost~~ Subtotal (i) for the adjusted
20 performance bond amount to determine the adjusted Gross Cost.

21 ~~(iii);~~ Add 10 percent of the adjusted ~~g~~Gross ~~e~~Cost for the adjusted
22 administration and project management costs and 10 percent of the adjusted ~~g~~Gross
23 ~~e~~Cost for the adjusted future developments contingency.

24 ~~(iiiiv)~~ Add the adjusted ~~g~~Gross ~~e~~Cost (ii) to the sum of the percentages (iii) and
25 round the resulting total to the nearest \$1,000 to determine the adjusted financial
26 assurance amount.

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

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

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

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

35 [Amendment #1]

Revision 9 Explanation

36 This revision modifies Condition 30 to address financial assurance only for the LJIIA
37 components of the facility. The amount of \$8.847 million that is shown in the first paragraph
38 is the amount shown on Table 2 of the *Final Order on the Application*, which the condition
39 references. The initial bond or letter of credit amount has been adjusted, in accordance with
40 this condition, based on the final design configuration of the LJIIA components, as discussed
41 at page 12. As shown in Table 1 herein, the adjusted financial assurance amount for LJIIA is
42 \$4.705 million in 4th Quarter 2009 dollars.

43 The revision corrects the adjustment calculation to avoid double-counting of the
44 performance bond cost. Financial assurance for the LJIIA components is addressed by new
45 Condition 101, discussed below in Revision 33.

Revision 10

1 *Page 11, lines 18-25:*

- 2 31. If the certificate holder elects to use a bond to meet the requirements of Condition 30 or
- 3 Condition 101, the certificate holder shall ensure that the surety is obligated to comply
- 4 with the requirements of applicable statutes, Council rules and this site certificate when
- 5 the surety exercises any legal or contractual right it may have to assume construction,
- 6 operation or retirement of the energy facility. The certificate holder shall also ensure that
- 7 the surety is obligated to notify the Council that it is exercising such rights and to obtain
- 8 any Council approvals required by applicable statutes, Council rules and this site
- 9 certificate before the surety commences any activity to complete construction, operate or
- 10 retire the energy facility. [Amendment #1]

Revision 10 Explanation

11 This revision modifies Condition 31 to refer to the financial assurance requirements
12 for LJIIA (Condition 30) and LJIIB (Condition 101).

Revision 11

13 *Page 12, lines 9-23:*

- 14 37. During construction, the certificate holder shall implement measures to reduce traffic
- 15 impacts, including:
- 16 (a) Providing notice to adjacent landowners when heavy construction traffic is
- 17 anticipated.
- 18 (b) Providing appropriate traffic safety signage and warnings.
- 19 (c) Requiring flaggers to be at appropriate locations at appropriate times during
- 20 construction to direct traffic reduce accident risks.
- 21 (d) Using traffic diversion equipment (such as advanced signage and pilot cars)
- 22 when slow or oversize construction loads are anticipated.
- 23 (e) Maintaining at least one travel lane at all times to the extent reasonably possible
- 24 so that roads will not be closed to traffic because of construction vehicles. [Amendment
- 25 #1]
- 26 (f) Encouraging carpooling for the construction workforce.
- 27 (g) Including traffic control procedures in contract specifications for construction of
- 28 the facility.
- 29 (h) Keeping the access from Highway 19 free of gravel that tracks out onto the
- 30 highway.

Revision 11 Explanation

31 This revision modifies Condition 37 as requested by the certificate holder because it
32 might not be possible to maintain one open lane of travel at all times and in all locations
33 (especially at turns) when turbine component trucks are traveling to the site.

Revision 12

34 *Page 12, lines 26-38:*

- 35 39. The certificate holder shall construct all facility components in compliance with the
- 36 following setback requirements:
- 37 (a) ~~Facility~~All facility components must be at least 3,520 feet from the property line
- 38 of properties zoned residential use or designated in the Gilliam County Comprehensive
- 39 Plan as residential.

1 (b) Where (a) does not apply, the certificate holder shall maintain a minimum
2 distance of 110-percent of maximum blade tip height, measured from the centerline of
3 the turbine tower to the nearest edge of any public road right-of-way. The certificate
4 holder shall assume a minimum right-of-way width of 60 feet. The distance from any
5 turbine to the nearest residence or public road (except Rattlesnake Road and Stone Lane)
6 must be no less than the maximum blade tip height of the turbine plus 50 feet.

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

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

13 (ee) ~~Except where (a) or (b) apply, turbines and~~ The certificate holder shall maintain
14 a minimum distance of 250 feet measured from the center line of each turbine tower
15 meteorological towers must be at least 250 feet from any public road right of way, to the
16 nearest edge of any railroad right-of-way, exterior lot line or electrical substation.

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

21 (eg) ~~Except where (a) applies,~~ The certificate holder shall maintain a minimum
22 distance of 50 feet measured from any facility O&M building or substation must be at
23 least 50 feet to the nearest edge of any public road right-of-way, or railroad right-of-way
24 or exterior lot line the nearest boundary of the certificate holder's lease area.

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

29 [Amendment #1]

Revision 12 Explanation

30 This revision modifies Condition 39 to conform to setback distances that the Council
31 has required for other wind energy facilities. Sections (a) through (d) are identical to the
32 setback requirements that the Council adopted for the Shepherds Flat Wind Farm.²⁹¹

33 The change to section (b) provides for a setback of at least 110 percent of maximum
34 blade tip height from turbine towers to the nearest edge of a public road right-of-way. This
35 represents a decreased setback requirement compared to the current setback of maximum
36 blade tip height plus 50 feet. For the range of turbines proposed by the certificate holder, the
37 revised setback distance would be maximum blade tip height plus 38.8 feet for 1.5-MW
38 turbines up to a distance of maximum blade tip height plus 49.2 feet for 3.0-MW turbines.
39 Condition 27 limits the maximum blade tip height for turbines at the LJF to 150 meters (492
40 feet).

41 New section (c) provides for a setback of at least 1,320 feet (¼-mile) from turbine
42 towers to residences existing at the time of construction. This represents an increased setback
43 requirement compared to the current setback of maximum blade tip height plus 50 feet (under

²⁹¹ *Site Certificate for the Shepherds Flat Wind Farm* (July 25, 2008), Condition 40.

1 the current setback, the total distance to a residence would range from approximately 427 feet
2 for 1.5-MW turbines to 541 feet for 3.0-MW turbines).

3 New section (d) provides for a setback of at least 110 percent of maximum blade tip
4 height from turbine towers to the nearest boundary of the certificate holder's lease area. A
5 setback from the lease area boundary does not exist under the current condition. Under the
6 current condition, section (c) provides for a setback of 250 feet from an "exterior lot line."
7 The "lease area boundary" might coincide with an "exterior lot line" but could not lie farther
8 from the turbine location than the "exterior lot line." Therefore, the revision represents an
9 increased setback from the "exterior lot line." A setback of at least 110 percent of maximum
10 blade tip height (under the modified condition) would range from approximately 427 feet for
11 1.5-MW turbines to 541 feet for 3.0-MW turbines.

12 Current section (c) is renumbered as (e) and rephrased to be more consistent with the
13 phrasing of sections (b) through (d). New section (e) does not change the turbine tower
14 setbacks of at least 250 feet from railroad rights-of-way, exterior lot lines and substations. The
15 modification eliminates the 250-foot setbacks from public road rights-of way and exterior lot
16 lines. Instead, under modified section (b), a setback of 110 percent of maximum blade tip
17 height would apply to roads and, under new section (d), a setback of 110 percent of maximum
18 blade tip height from "the nearest boundary of the certificate holder's lease area" would
19 apply.

20 New section (f) restates the setbacks for met towers that are currently contained within
21 section (c). The modification does not change the setback distance.

22 Current section (d) is renumbered as (g) and rephrased to be more consistent with the
23 phrasing of sections (b) through (d). New section (g) addresses setback distances that apply to
24 the O&M buildings. The modification replaces the current setback from any "exterior lot line"
25 with a setback from "the nearest boundary of the certificate holder's lease area." The setback
26 distance is unchanged.

27 New section (h) addresses setbacks for the facility substations, currently included in
28 section (d). The modification replaces the current setback from any "exterior lot line" with a
29 setback from "the nearest boundary of the certificate holder's electrical substation easement
30 or, if there is no easement, the nearest boundary of the certificate holder's lease area." The
31 substation for LJIIA will be located on an easement.²⁹²

Revision 13

32 *Page 13, lines 5-8:*

33 42. Before beginning construction of any phase of the facility, the certificate holder shall
34 record in the real property records of Gilliam County a Covenant Not to Sue with regard
35 to generally accepted farming practices on ~~adjacent~~-farmland adjacent to the
36 construction area consistent with Gilliam County Zoning Ordinance 7.020(T)(4)(a)(5).
37 [Amendment #1]

Revision 13 Explanation

38 This revision modifies Condition 42 to allow separate recording of applicable
39 Covenants Not to Sue as each phase of construction proceeds.

²⁹² Email from Jeffrey Durocher, September 3, 2009, and Response to RAI (table), p. 7.

Revision 14

1 *Page 13, lines 11-16:*

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

Revision 14 Explanation

9 This revision modifies Condition 44 to require “as-built” information be provided to
10 the Department and to the Gilliam County Planning Director separately for each phase of
11 construction.

Revision 15

12 *Page 13, lines 17-29:*

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

Revision 15 Explanation

28 This revision modifies Condition 45 to specify that it applies to cultural resource
29 investigations related to the LJIA components. New Condition 102 described below in
30 Revision 34 is a similar condition related to the LJIB components.

Revision 16

31 *Page 14, lines 1-4:*

- 32 48. During construction of the LJIA components as described in the Final Order on
33 Amendment #1 ~~facility~~, the certificate holder shall label all identified historic, cultural or
34 archaeological resource sites on construction maps and drawings as “no entry” areas,
35 and if construction activities will occur within 200 feet of an identified site, the
36 certificate holder shall flag a 50-foot buffer around the site. During construction of the
37 LJIB components, the certificate holder shall label the site identified as LJ-4/10/09-8 in
38 the Request for Amendment #1 on construction maps and drawings as a “no entry” area.

1 and if construction will occur within 200 feet of the site, the certificate holder shall flag
2 a 50-foot buffer around the site. [Amendment #1]

Revision 16 Explanation

3 This revision modifies Condition 48 to provide a construction buffer around a site
4 identified in the Request for Amendment #1 as potentially eligible for listing on the National
5 Register of Historic Places.

Revision 17

6 *Page 14, lines 5-10:*

7 49. Before beginning construction of any phase of the facility, the certificate holder shall
8 conduct site-specific geotechnical investigations of that phase and shall report its
9 findings to the Oregon Department of Geology & Mineral Industries (DOGAMI). The
10 certificate holder shall conduct the geotechnical investigation after consultation with
11 DOGAMI and in general accordance with DOGAMI open file report 00-04 “Guidelines
12 for Engineering Geologic Reports and Site-Specific Seismic Hazard Reports.”
13 [Amendment #1]

Revision 17 Explanation

14 This revision modifies Condition 49 to allow separate site-specific geotechnical
15 investigations as each phase of construction proceeds.

Revision 18

16 *Page 14, lines 22-25:*

17 53. Before beginning construction of any phase of the facility, the certificate holder shall
18 submit ~~a~~ Notices of Proposed Construction or Alteration to the Federal Aviation
19 Administration (FAA) and the Oregon Department of Aviation identifying the proposed
20 final locations of the turbines and related or supporting facilities in that phase of
21 construction. The certificate holder shall promptly notify the Department of the ~~FAA’s~~
22 responses from the FAA and the Oregon Department of Aviation ~~as soon as it has been~~
23 received. [Amendment #1]

Revision 18 Explanation

24 This revision modifies Condition 53 to allow separate notifications to the FAA and the
25 Oregon Department of Aviation as each phase of construction proceeds. The revision adds
26 notification of the Oregon Department of Aviation as required under OAR 738-070-0080.

Revision 19

27 *Page 16, lines 23-42, and page 17, lines 1-4:*

28 72. During construction, the certificate holder shall avoid impacts to waters of the state in
29 the following manner:
30 (a) The certificate holder shall avoid any disturbance, including the placement of
31 poles for the collector line, within 25 feet of the stream channel in the area identified as
32 “S5” on Figure J-1 of the Site Certificate Application.
33 (b) The certificate holder shall avoid any disturbance to the six wetland areas
34 identified as “W1” through “W6” on Figure J-1 of the Site Certificate Application and
35 the wetland area identified as “W-8” in the Request for Amendment #1, Attachment 11,
36 Figure 6. [Amendment #1]

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

3 (d) Before beginning construction affecting the location identified as “S27”_on
4 Figure J-1 of the Site Certificate Application, the certificate holder shall apply for and
5 obtain a Removal/Fill Permit from the Department of State Lands, which, in accordance
6 with ORS 469.401, shall issue the permit substantially in the form of Attachment F of
7 the Final Order on the Application and subject only to the conditions of this site
8 certificate including substantive requirements listed in that attachment.

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

Revision 19 Explanation

19 This revision modifies Condition 72 to require avoidance of wetland area “W-8”
20 identified in the wetlands and waters delineation report that was included in the Request for
21 Amendment #1 (Attachment 11). In addition, modification of section (e) allows for separate
22 pre-construction investigations as each phase of construction proceeds.

Revision 20

23 *Page 17, lines 11-14:*

24 74. The certificate holder shall restore areas outside the permanent footprint that are
25 disturbed during construction according to the methods and monitoring procedures
26 described in the Revegetation Plan that is incorporated in the Final Order on ~~the~~
27 Application Amendment #1 as Attachment B and as amended from time to time.
28 [Amendment #1]

Revision 20 Explanation

29 This revision modifies Condition 74 to update the cross-reference where the applicable
30 *Revegetation Plan* is to be found. The Department recommended that the Council revise the
31 *Revegetation Plan* as described in Attachment B, which is incorporated in this order.

Revision 21

32 *Page 17, lines 29-34:*

33 78. The certificate holder shall install the 34.5-kV collector system underground to the
34 extent practical. The certificate holder shall install underground segments of the
35 collector system at a minimum depth of three feet. Where geotechnical conditions or
36 other engineering considerations require, the certificate holder may install segments of
37 the collector system aboveground, but the total length of aboveground segments must
38 not exceed ~~9.9 miles~~ 30 percent of the collector system, excluding the optional parallel
39 double-circuit 34.5-kV lines that may be built to carry power from the LJIIB area to the
40 LJIIA substation as described in the Final Order on Amendment #1. The certificate
41 holder shall construct aboveground segments of the collector system using single or

1 double circuit monopole design as described in the site certificate application.
2 [\[Amendment #1\]](#)

Revision 21 Explanation

3 This revision modifies Condition 78 to limit aboveground segments of the LJF
4 collector system (including LJIIA and LJIIB components) to no more than 30 percent of the
5 total collector system. This limitation does not include up to 6.1 miles of aboveground parallel
6 double-circuit 34.5-kV lines that may be built to carry power from the LJIIB area to the LJIIA
7 substation, described herein at page 6. The revision specifies that underground collector line
8 be installed at a minimum depth of three feet to comply with GCZO Section
9 7.020(T)(4)(d)(7).

Revision 22

10 *Page 18, lines 4-13:*

- 11 81. The certificate holder shall take reasonable steps to reduce or manage human exposure
12 to electromagnetic fields, including but not limited to:
13 (a) Constructing all aboveground transmission lines at least 200 feet from any
14 residence or other occupied structure.
15 (b) Ensuring that the area near the facility substation is inaccessible to the public by
16 fencing the area.
17 (c) Constructing aboveground 34.5-kV transmission lines with a minimum clearance
18 of 25 feet from the ground.
19 (d) Constructing all aboveground 230-kV transmission lines with a minimum
20 clearance of 30 feet from the ground.
21 ~~(de)~~ Providing to landowners a map of underground and overhead transmission lines
22 on their property and advising landowners of possible health risks.

23 [\[Amendment #1\]](#)

Revision 22 Explanation

24 This revision modifies Condition 81 to require a minimum ground clearance of 30 feet
25 for the 230-kV transmission line that may be built to carry power from the optional LJIIB
26 substation to the LJIIA substation.

Revision 23

27 *Page 18, lines 17-20:*

- 28 83. The certificate holder shall design all aboveground transmission line support structures
29 following the practices suggested by the Avian Powerline Interaction Committee
30 (19962006) and shall install anti-perching devices on transmission pole tops and cross
31 arms where the poles are located within ½ mile of turbines. [\[Amendment #1\]](#)

Revision 23 Explanation

32 This revision modifies Condition 83 to apply the APLIC guidelines issued in 2006.

Revision 24

33 *Page 18, lines 21-42, and page 19, lines 1-2:*

- 34 84. The certificate holder may construct turbines and other facility components within the
35 site boundary as described in ~~micrositing areas identified in Attachment D~~ of the Final

1 Orders on the Application and Amendment #1, subject to the following requirements
2 addressing potential habitat impact:

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

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

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

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

19 (e) If construction would affect locations within the microsites areas that were not
20 previously surveyed in 2005 and 2006 for the occurrence of State or federal threatened
21 or endangered species as described in the Final Orders on the Application and
22 Amendment #1, the certificate holder shall conduct additional pre-construction surveys
23 of those locations, notify the Department of the findings and implement appropriate
24 avoidance or mitigation measures for any threatened or endangered species detected,
25 subject to Department approval.

26 [Amendment #1]

Revision 24 Explanation

27 This revision modifies Condition 84 to incorporate the LJIIB areas within the site
28 boundary. The modification to section (d) adds protection of populations of Laurent's milk-
29 vetch, a State-listed threatened plant species. The modification to section (e) requires pre-
30 construction surveys for threatened and endangered species if construction of LJIIB or LJIIB
31 components would affect any areas that have not been surveyed previously.

Revision 25

32 *Page 19, lines 3-18:*

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

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

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

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

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

6 [Amendment #1]

Revision 25 Explanation

7 This revision modifies Condition 85 to allow separate exclusion area flagging around
8 sensitive wildlife habitat areas as each phase of construction proceeds.

Revision 26

9 *Page 19, lines 19-41, and page 20 lines 1-2:*

10 86. During construction of any phase of the facility, the certificate holder shall protect the
11 area within a 1300-foot buffer around active nests of the following species during the
12 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

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

36 [Amendment #1]

Revision 26 Explanation

1 This revision modifies Condition 86 to allow separate exclusion area flagging,
2 monitoring and construction restrictions around active raptor nests as each phase of
3 construction proceeds.

Revision 27

4 *Page 20, lines 3-5:*

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 ~~the~~
7 Application Amendment #1 as Attachment A and as amended from time to time.
8 [Amendment #1]

Revision 27 Explanation

9 This revision modifies Condition 87 to update the cross-reference where the applicable
10 *Wildlife Monitoring and Mitigation Plan* is to be found. The Department recommended that
11 the Council revise the *Wildlife Monitoring and Mitigation Plan* as described in Attachment A,
12 which is incorporated in this order.

Revision 28

13 *Page 20, lines 6-9:*

14 88. Before beginning construction of the LJIIA components as described in the *Final Order*
15 *on Amendment #1*, the certificate holder shall obtain an Incidental Take Permit (ITP)
16 letter from the Oregon Department of Fish and Wildlife (ODFW) that incorporates the
17 terms and commitments of the ITP application as set forth in Attachment E of the Final
18 Order on the Application. [Amendment #1]

Revision 28 Explanation

19 This revision modifies Condition 88 to clarify that the ITP is required before
20 construction of the LJIIA components. An ITP is not required for the LJIB area.

Revision 29

21 *Page 20, lines 10-16:*

22 89. The certificate holder shall acquire the legal right to create, enhance, maintain and
23 protect a habitat mitigation area as long as the site certificate is in effect by means of an
24 outright purchase, conservation easement or similar conveyance and shall provide a copy
25 of the documentation to the Department. Within the habitat mitigation area, the
26 certificate holder shall improve the habitat quality as described in the Habitat Mitigation
27 Plan that is incorporated in the Final Order on ~~the Application~~ Amendment #1 as
28 Attachment C and as amended from time to time. [Amendment #1]

Revision 29 Explanation

29 This revision modifies Condition 89 to update the cross-reference where the applicable
30 *Habitat Mitigation Plan* is to be found. The Department recommended that the Council revise
31 the *Habitat Mitigation Plan* as described in Attachment C, which is incorporated in this order.

Revision 30

1 *Page 20, lines 28-33:*

- 2 92. The certificate holder shall not use exterior lighting at the facility except:
 - 3 (a) The minimum turbine tower lighting required or recommended by the Federal
 - 4 Aviation Administration.
 - 5 (b) Security lighting at the operations and maintenance buildings and at the
 - 6 substations, provided that such lighting is shielded or downward-directed to reduce
 - 7 glare.
 - 8 (c) Minimum lighting necessary for repairs or emergencies.
 - 9 (d) Minimum lighting necessary for construction directed to illuminate the work area
 - 10 and shielded or downward-directed to reduce glare.

11 [Amendment #1]

Revision 30 Explanation

12 This revision modifies Condition 92 to allow the use of lighting for nighttime
13 construction of the facility.

Revision 31

14 *Page 21, lines 1-21:*

- 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 at
 - 18 ~~the facility~~ in 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
 - 23 design 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 substation
 - 26 transformers) would meet the ambient noise degradation test and maximum allowable
 - 27 test at the appropriate measurement point for all potentially-affected noise sensitive
 - 28 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 operation
 - 33 of the facility to increase ambient statistical noise levels L₁₀ and L₅₀ by more than 10
 - 34 dBA at the appropriate measurement point. The legally-effective easement or real
 - 35 covenant must: include a legal description of the burdened property (the noise sensitive
 - 36 property); be recorded in the real property records of the county; expressly benefit the
 - 37 certificate holder; expressly run with the land and bind all future owners, lessees or
 - 38 holders of any interest in the burdened property; and not be subject to revocation without
 - 39 the certificate holder’s written approval.

40 [Amendment #1]

Revision 31 Explanation

1 This revision modifies Condition 94 to allow separate noise analysis as each phase of
2 construction proceeds. The certificate holder must demonstrate that the facility as a whole
3 complies with the applicable noise control regulations.

Revision 32

4 *Page 22, following line 18:*

5 VI. CONDITIONS ADDED BY AMENDMENT #1

Revision 32 Explanation

6 This revision adds a new section to the site certificate to include new conditions
7 addressed in this order. The subsequent sections of the site certificate would be re-numbered
8 accordingly.

Revision 33

9 *Page 22, following Revision 32:*

10 101. Before beginning construction of the LJIB components as described in the *Final Order*
11 *on Amendment #1*, the certificate holder shall submit to the State of Oregon through the
12 Council a bond or letter of credit in the amount described herein naming the State of
13 Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or
14 letter of credit amount is \$7.281 million (in 4th Quarter 2009 dollars), adjusted to the
15 date of issuance as described in (b), or the amount determined as described in (a). The
16 certificate holder shall adjust the amount of the bond or letter of credit on an annual
17 basis thereafter as described in (b).

18 (a) The certificate holder may adjust the amount of the bond or letter of credit based
19 on the final design configuration of the LJIB components by applying the unit costs and
20 general costs illustrated in Table 2 of the *Final Order on Amendment #1* to the final
21 design and calculating the financial assurance amount as described in that order,
22 adjusted to the date of issuance as described in (b) and subject to approval by the
23 Department.

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

26 (i) Adjust the Subtotal component of the bond or letter of credit amount
27 (expressed in 4th Quarter 2009 dollars) to present value, using the U.S. Gross Domestic
28 Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department
29 of Administrative Services' "Oregon Economic and Revenue Forecast" or by any
30 successor agency (the "Index") and using the index value for 4th Quarter 2009 dollars
31 and the quarterly index value for the date of issuance of the new bond or letter of credit.
32 If at any time the Index is no longer published, the Council shall select a comparable
33 calculation to adjust 4th Quarter 2009 dollars to present value.

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

36 (iii) Add 10 percent of the adjusted Gross Cost for the adjusted administration
37 and project management costs and 10 percent of the adjusted Gross Cost for the adjusted
38 future developments contingency.

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

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

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

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

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

Revision 33 Explanation

9 This revision adds a condition to the site certificate to address the financial assurance
10 requirement for the LJIIB components. This condition and Condition 30 provide separate
11 financial assurance amounts for the LJIIB and LJIIA components of the facility. The amount
12 of \$7.281 million that is shown in the first paragraph is the amount shown in Table 2 and
13 includes general costs applicable if the LJIIB components are operated separately or sold as a
14 separate facility. When the certificate holder is ready to begin construction of the LJIIB
15 components, the initial bond or letter of credit amount may be adjusted, as described in this
16 condition. If the certificate holder at that time notifies the Department that the LJF is being
17 constructed, operated and retired as a whole (including all LJIIA and LJIIB components), the
18 general costs would be accounted for in the financial assurance amount for LJIIA and would
19 be omitted in calculating the adjusted financial assurance amount for LJIIB.

Revision 34

20 *Page 22, following Revision 33:*

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

Revision 34 Explanation

36 This revision adds a condition to the site certificate to protect cultural resources
37 identified by surveys of the LJIIB area. This condition is similar to Condition 45, which
38 addresses the LJIIA area as discussed above in Revision 13.

Revision 35

39 *Page 22, following Revision 34:*

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

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

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

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

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

Revision 35 Explanation

17 This revision adds a condition to the site certificate to address protection of any visible
18 remnants of the Oregon Trail within the LJIB area.

Revision 36

19 *Page 22, following Revision 35:*

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, Divisions 51 and 55. The
24 certificate holder shall submit the necessary application or applications in a form
25 satisfactory to ODOT and the Department for the location, construction and maintenance
26 of approaches to State Highway 19 for access to the site. The certificate holder shall
27 submit the 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.

Revision 36 Explanation

30 This revision adds a condition to the site certificate to address the ODOT permits
31 required for access road approaches and utility crossings along State Highway 19 that are
32 necessary for construction of the LJIB components.

VIII. ORDER

1 The Council approves Amendment #1 and issues an amended site certificate for the
2 Leaning Juniper II Wind Power Facility, subject to the terms and conditions set forth above.

Issued this 20th day of November, 2009.

THE OREGON ENERGY FACILITY SITING COUNCIL

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

Attachments

Attachment A: Wildlife Monitoring and Mitigation Plan

Attachment B: Revegetation Plan

Attachment C: Habitat Mitigation Plan

Notice of the Right to Appeal

You have the right to appeal this order to the Oregon Supreme Court pursuant to ORS 469.403. To appeal you must file a petition for judicial review with the Supreme Court within 60 days from the day this order was served on you. If this order was personally delivered to you, the date of service is the date you received this order. If this order was mailed to you, the date of service is the date it was mailed, not the day you received it. If you do not file a petition for judicial review within the 60-day time period, you lose your right to appeal.