

KLONDIKE III WIND PROJECT:
FINAL ORDER ON AMENDMENT #4

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LIST OF ABBREVIATIONS

Council	Energy Facility Siting Council
Department	Oregon Department of Energy
dBa	The “A-weighted” sound pressure level. The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighted filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
DEQ	Oregon Department of Environmental Quality
IBR	Iberdrola Renewables, Inc.
kV	kilovolt or kilovolts
LCDC	Land Conservation and Development Commission
PPM	PPM Energy, Inc.
MHI-1	the turbine location within the new micrositing area addressed by Amendment #2
MW	megawatt or megawatts
SCCP	Sherman County Comprehensive Plan
SCZO	Sherman County Zoning Ordinance

**KLONDIKE III WIND PROJECT:
FINAL ORDER ON AMENDMENT #4**

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, Klondike Wind Power III LLC, for amendment of the site certificate for the Klondike
4 III Wind Project (KWP).

5 The Council issued a site certificate for the KWP on June 30, 2006. The Council has
6 approved three previous site certificate amendments: Amendment #1 (November 3, 2006),
7 Amendment #2 (July 27, 2007) and Amendment #3 (November 16, 2007). Construction of the
8 facility was completed in 2008. The facility is currently operating with 176 wind turbines and
9 a peak generating capacity of approximately 300 megawatts.

10 The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this
11 order, except where otherwise stated or where the context indicates otherwise.

II. PROCEDURAL HISTORY AND AMENDMENT PROCESS

12 On December 6, 2010, the certificate holder submitted the Request for Amendment #4
13 to the Oregon Department of Energy (Department).¹ On December 14, the Department sent
14 notice of the amendment request to all persons on the Council's mailing list, to the special
15 mailing list established for the facility and to an updated list of property owners supplied by
16 the certificate holder, requesting public comments on the amendment request by January 10,
17 2011. In addition, the notice was posted on the Department's website. On December 17, the
18 certificate holder sent copies of the amendment request to a list of reviewing agencies
19 provided by the Department with a memorandum from the Department requesting agency
20 comments by January 10, 2011. On December 20, the Department notified the certificate
21 holder that the proposed order would be issued no later than February 18, 2011. The
22 Department did not receive any substantive comments from the public or from reviewing
23 agencies.

24 The Department analyzed the Request for Amendment #4 for compliance with all
25 applicable Council standards. The Department issued a proposed order on February 15, 2011.
26 The proposed order contained the Department's recommended findings and conclusions. The
27 Department recommended that the Council approve the amendment request, subject to
28 recommended revisions of the site certificate.

29 On February 17, 2011, the Department issued a public notice of the proposed order
30 and sent the notice to the certificate holder, to the reviewing agencies, to the property owners
31 in the vicinity of the facility, to all other special lists for the facility and to the Council's
32 general mailing list. The notice specified a deadline of March 21, 2011, for the public to
33 submit comments or requests for a contested case. The Department has not received any
34 comments or contested case requests.

¹ "Request for Amendment No. 4 to the Site Certificate for the Klondike III Wind Power Facility," referred to herein as the Request for Amendment #4.

1 The Council considered the amendment request at a meeting on March 25, 2011, and
2 voted to approve the amendment request subject to the revisions discussed herein.

III. DESCRIPTION OF THE PROPOSED AMENDMENT

3 If approved, Amendment #4 would allow the certificate holder to replace the rotor on
4 the wind turbine at location MHI-1. This turbine is located south of Gosson Lane and east of
5 Sandon Road. Currently, the site certificate limits the rotor diameter for this turbine to 92.5
6 meters. The amendment would allow the use of a rotor having a diameter of up to 102 meters.
7 The rotor replacement would not change the generating capacity of the turbine (2.4 MW).

1. Amendment Procedure

8 Under OAR 345-027-0050, a site certificate amendment is needed because the
9 certificate holder proposes to construct and operate the KWP in a manner different from the
10 description in the current site certificate. In particular, the certificate holder proposes to install
11 a rotor on the turbine at location MHI-1 that exceeds the rotor diameter limit specified in
12 Condition 28 of the site certificate. The proposed installation of a larger rotor would require a
13 change to Condition 28.

14 The Department and the Council must follow the procedures of OAR 345-027-0070 in
15 reviewing the amendment request. In making its decision on an amendment of a site
16 certificate, the Council applies the applicable state statutes, administrative rules and local
17 government ordinances that are in effect on the date the Council makes its decision, except
18 when applying the Land Use Standard.² In making findings on the Land Use Standard, the
19 Council applies the applicable substantive criteria in effect on the date the certificate holder
20 submitted the request for amendment. For this type of amendment, the Council must consider
21 whether the amendment would affect any finding made by the Council in an earlier order. The
22 Council must consider whether the amount of the bond or letter of credit required under OAR
23 345-022-0050 is adequate. We address compliance with these requirements below in Sections
24 IV and V.

2. The Certificate Holder's Proposed Amendments to the Site Certificate

25 The certificate holder describes the proposed changes to the facility in Section 3.3 of
26 the amendment request.³ The proposed amendment would change the allowable rotor
27 diameter on one specified wind turbine. The rotor replacement would not change the site
28 boundary, increase the number of turbines or the change the generating capacity of the
29 facility.

30 In Attachment 1 of its Request for Amendment #4, the certificate holder proposes
31 specific amendment language for the site certificate. The Department recommended that the
32 Council approve the substance of the site certificate amendments proposed by the certificate
33 holder and other modifications consistent with the amendment request. The Department's
34 recommended site certificate revisions are discussed below at page 30.

² OAR 345-027-0070(10).

³ Request for Amendment #4, Section 3, p. 2.

3. Description of the Facility as Authorized by Amendment #4

1 The *Final Order on the Application for the Klondike III Wind Project* (June 30, 2006)
2 describes the facility as originally approved by the Council. The facility description has been
3 modified by the *Final Order on Amendment #1* (November 3, 2006), the *Final Order on*
4 *Amendment #2* (July 27, 2007) and the *Final Order on Amendment #3* (November 16, 2007).
5 If the Council approves Amendment #4, the certificate holder would be authorized to
6 construct and operate the KWP facility as described in the Council's previous orders, except
7 as modified by the changes described below.

8 Turbine Selection

9 If approved by the Council, the certificate holder would be permitted to construct any
10 turbine type at location MHI-1, subject to the restrictions that that the hub height does not
11 exceed 80 meters, the rotor diameter does not exceed 102 meters, the peak generating
12 capacity does not exceed 2.4 megawatts and the maximum sound power level does not exceed
13 110 dBA.⁴

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

14 The Council must decide whether the amendment complies with the facility siting
15 standards adopted by the Council. In addition, the Council must impose conditions for the
16 protection of the public health and safety, conditions for the time of commencement and
17 completion of construction and conditions to ensure compliance with the standards, statutes
18 and rules described in ORS 469.501 and 469.503.⁵

19 The Council is not authorized to determine compliance with regulatory programs that
20 have been delegated to another state agency by the federal government.⁶ Nevertheless, the
21 Council may consider these programs in the context of its own standards to ensure public
22 health and safety, resource efficiency and protection of the environment. The Council has no
23 jurisdiction over design or operational issues that do not relate to siting, such as matters
24 relating to employee health and safety, building code compliance, wage and hour or other
25 labor regulations, or local government fees and charges.⁷

1. General Standard of Review

26 **OAR 345-022-0000**

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

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

⁴ The location of MHI-1 is shown on the Project Facilities Map, email from Sara Parsons, December 14, 2010.

⁵ ORS 469.401(2).

⁶ ORS 469.503(3).

⁷ ORS 469.401(4).

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

11 * * *

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

2. Standards about the Applicant

(a) Organizational Expertise

OAR 345-022-0010

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

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

33 (3) *If the applicant does not itself obtain a state or local government permit or*
34 *approval for which the Council would ordinarily determine compliance but*
35 *instead relies on a permit or approval issued to a third party, the Council, to issue*
36 *a site certificate, must find that the third party has, or has a reasonable likelihood*
37 *of obtaining, the necessary permit or approval, and that the applicant has, or has*
38 *a reasonable likelihood of entering into, a contractual or other arrangement with*
39 *the third party for access to the resource or service secured by that permit or*
40 *approval.*

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

Findings of Fact

8 In the *Final Order on Amendment #1*, the Council found that the certificate holder,
9 Klondike Wind Power III LLC, as a wholly-owned subsidiary of PPM Energy, Inc. (PPM),
10 would rely on PPM to provide the organizational, managerial and technical expertise to
11 construct and operate the KWP. In the *Final Order on Amendment #3*, the Council found that
12 PPM continued to have experience in power project engineering, design, development,
13 construction and operation of wind energy facilities. PPM Energy has since changed its name
14 to “Iberdrola Renewables, Inc.” (IBR). The Council has previously found that IBR or its
15 subsidiaries have the organizational expertise to construct and operate other wind energy
16 facilities in Oregon, including the Leaning Juniper II Wind Power Facility, the Helix Wind
17 Power Facility and the Montague Wind Power Facility. The proposed amendment would not
18 affect these findings. There are no third-party permits needed for the proposed rotor
19 replacement.

Conclusions of Law

20 For the reasons discussed above, the Council concludes that certificate holder would
21 meet the Council’s Organizational Expertise Standard if Amendment #4 were approved.

(b) Retirement and Financial Assurance

22 **OAR 345-022-0050**

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

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

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

Findings of Fact

A. Site Restoration

30 In the *Final Order on the Amendment #3*, the Council found that the KWP site could
31 be restored adequately to a useful, non-hazardous condition following permanent cessation of
32 construction or operation of the facility.⁸ The proposed rotor replacement would have no
33 effect on the Council’s previous finding.

⁸ *Final Order on Amendment #3*, pp. 8-11.

B. Estimated Cost of Site Restoration

In compliance with Condition 32, the certificate holder has submitted a letter of credit from Bank of America in the current adjusted amount of \$9.936 million (2nd Quarter 2010 dollars). The current letter of credit was approved by the Council on January 23, 2009, and is subject to annual adjustment.

The rotor replacement proposed by this amendment would not affect the site restoration cost. In making an estimate of site restoration costs, the Department uses a cost estimating guide that includes a unit cost for the removal and disposal of turbine rotors. The size of the rotor (consisting of the turbine hub and blades) does not affect the unit cost. The proposed amendment, therefore, would not affect the Council’s previous findings regarding the financial assurance amount.

Under OAR 345-027-0070(10)(d), the Council must “consider whether the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.” The Department has recently updated its draft “Site Restoration Cost Estimating Guide”; nevertheless, the Council finds that the financial assurance amount calculated under the earlier version of the guide and adjusted in accordance with Condition 32 provides an adequate amount for the bond or letter of credit required under OAR 345-022-0050. In making this finding, the Council considered that the KWP is an operating facility with a letter of credit currently in place and that the proposed amendment affects a single wind turbine within a facility consisting of 176 turbines.

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

The certificate holder currently has a letter of credit in place. The letter of credit has been approved by the Council as to form, amount and issuer. The Council finds that the certificate holder has demonstrated its ability to obtain an acceptable bond or letter of credit.

Conclusions of Law

Based on the findings discussed above, the Council concludes that the certificate holder would meet the Retirement and Financial Assurance Standard if Amendment #4 were approved.

3. Standards about Impacts of Construction and Operation

(a) Land Use

OAR 345-022-0030

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

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

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

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and

1 *Development Commission administrative rules and goals and any land use statutes*
2 *directly applicable to the facility under ORS 197.646(3);*

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

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

11 *(3) As used in this rule, the “applicable substantive criteria” are criteria from the*
12 *affected local government’s acknowledged comprehensive plan and land use*
13 *ordinances that are required by the statewide planning goals and that are in effect*
14 *on the date the applicant submits the application. If the special advisory group*
15 *recommends applicable substantive criteria, as described under OAR 345-021-*
16 *0050, the Council shall apply them. If the special advisory group does not*
17 *recommend applicable substantive criteria, the Council shall decide either to make*
18 *its own determination of the applicable substantive criteria and apply them or to*
19 *evaluate the proposed facility against the statewide planning goals.*

20 *(4) The Council may find goal compliance for a proposed facility that does not*
21 *otherwise comply with one or more statewide planning goals by taking an*
22 *exception to the applicable goal. Notwithstanding the requirements of ORS*
23 *197.732, the statewide planning goal pertaining to the exception process or any*
24 *rules of the Land Conservation and Development Commission pertaining to the*
25 *exception process, the Council may take an exception to a goal if the Council*
26 *finds:*

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

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

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

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

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

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

42 * * *

Findings of Fact

1 In the *Final Order on the Application*, the Council found the proposed KWP would
2 comply with the statewide planning goals based on a land use analysis under ORS
3 469.504(1)(b)(B).⁹ The Council's previous findings are incorporated herein by this reference.
4 The Council found that the facility complied with the applicable substantive criteria identified
5 by the local government, except for two provisions of the Sherman County Zoning Ordinance
6 (SCZO): Sections 3.1.4 and 5.8.16(d).¹⁰

7 SCZO Section 3.1.4 requires a setback of 30 feet from the property line, "except that
8 the front yard setback requirement from the right-of-way line of an arterial or major collector
9 road or street shall be 50 feet unless approved otherwise by the Planning Commission."
10 Condition 42 incorporates this requirement, but excludes "transmission lines and junction
11 boxes." The exclusion was put into the condition so that these structures could be located to
12 reduce interference with farm operations. The exclusion, however, resulted in non-compliance
13 with the ordinance.¹¹

14 SCZO Section 5.8.16(d) requires that "non-farm uses" must be "situated upon
15 generally unsuitable land for the production of farm crops and livestock." The KWP is a non-
16 farm use. The Council has found that the KWP is located on land "generally suitable" for crop
17 production and does not comply with SCZO Section 5.8.16(d).¹²

18 Because the facility did not meet all applicable substantive criteria recommended by
19 the special advisory group, the Council, in accordance with ORS 469.504(1)(b)(B),
20 considered whether the facility complied with applicable statewide planning goals. The
21 applicable statewide planning goal in this case is Goal 3, which is the state's Agricultural
22 Lands goal. The Council found that the KWP would occupy more than 20 acres and that the
23 use therefore did not comply with OAR 660-033-0130(22) and Goal 3. The Council found
24 that an exception to Goal 3 was justified under the criteria for a "reasons" exception in ORS
25 469.504(2)(c).¹³

26 In the final orders on Amendments #1, #2 and #3, the Council found that the changes
27 in the facility approved under those amendments would alter design and construction details
28 and would enlarge the facility site but would not change the proposed land use. Specifically,
29 in Amendment #2, the Council approved the construction and operation of a wind turbine at
30 location MHI-1 and approved the land use at that location. For each of the amendments, the
31 Council applied the same land use analysis that it had applied in the *Final Order on the*

⁹ *Final Order on the Application*, pp. 20-46.

¹⁰ The Special Advisory Group identified Article 5 of the Sherman County Zoning Ordinance (SCZO) as applicable to the KWP. The Council found that the substantive criteria contained in Article 5 of the SCZO are in Sections 5.2 and 5.8. The other sections of the article are procedural. *Final Order on the Application*, p. 22-23. Under SCZO Section 5.2.2, the proposed facility must comply with the requirements of the applicable primary zone and any applicable combining zone. The KWP is located entirely within an Exclusive Farm Use zone, which is designated "F-1" under SCZO Section 3.1. Accordingly, the Council also considered whether the facility would comply with the criteria in SCZO Section 3.1. *Final Order on the Application*, p. 27. In addition, SCZO Section 5.2.2 requires consideration of other provisions of the SCZO that are determined "applicable to the subject use." The Council found that SCZO Sections 4.2 and 4.9 were applicable to the proposed use. *Final Order on the Application*, p. 31.

¹¹ *Final Order on the Application*, pp. 28-29.

¹² *Final Order on the Application*, p. 37.

¹³ *Final Order on the Application*, pp. 43-46.

1 *Application*, and in each case, the Council determined that the amendments would not alter
2 the reasons supporting a Goal 3 exception.¹⁴ The Council found that the facility, with the
3 changes proposed in Amendments #1, #2 and #3, met the Land Use Standard.

A. Applicable Substantive Criteria

4 The Council must consider whether proposed Amendment #4 would affect any finding
5 made by the Council in an earlier order. The proposed rotor replacement would not change
6 the previously-approved land use or add new land to the site boundary. The Council finds that
7 the proposed rotor replacement would not substantially change the facts on which the Council
8 relied in its previous findings of compliance with the applicable Sherman County land use
9 criteria. In June 2007, Sherman County updated the Sherman County Comprehensive Plan
10 (SCCP), and on November 21, 2007, the County adopted Ordinance 39-2007 (which
11 addresses setback requirements for adjacent but separate wind projects). Otherwise, the
12 applicable substantive criteria identified by the Sherman County Special Advisory Group at
13 the time of the Council's review of the site certificate application have not changed.¹⁵

14 SCZO Section 5.2.1 requires that the proposed use be compatible with the SCCP and
15 applicable policies. The applicable policies of the SCCP were addressed by the Council in the
16 *Final Order on the Application*.¹⁶ The update of the SCCP in 2007 did not substantially
17 change the applicable policies. The Council addressed the updated SCCP in the *Final Order*
18 *on Amendment #3 for the Biglow Canyon Wind Farm*, and the Council's findings in that order
19 are incorporated herein by this reference.¹⁷ The proposed rotor replacement would not affect
20 the Council's previous findings of compliance with SCZO Section 5.2.1 and the applicable
21 policies of the SCCP.

22 Ordinance 39-2007 prescribes setback distances for wind turbines from neighboring
23 properties if the developer is unable to negotiate a setback agreement with the neighboring
24 landowners. The specified setback distances apply to turbines located near the "project
25 boundaries" and not to turbines located "internally" within the project area.¹⁸ The Council
26 approved location MHI-1 for construction and operation of a wind turbine in July 2007 before
27 Ordinance 39-2007 became effective, and the proposed amendment would not change the use
28 or the location of the use. The Council finds that Ordinance 39-2007 does not apply
29 retroactively to turbine location MHI-1 and that the prescribed setback distances would not
30 apply to turbine location MHI-1 because it is located "internally" within the KWP project
31 area.

B. Applicable Statewide Planning Goals

32 As discussed above, the Council previously found that the KWP does not comply with
33 SCZO Sections 3.1.4 (setback requirements) and 5.8.16(d) (use of land generally unsuitable
34 for crop production and livestock) and therefore considered whether the facility would

¹⁴ *Final Order on Amendment #1*, p. 24, *Final Order on Amendment #2*, p. 15, and *Final Order on Amendment #3*, p. 22.

¹⁵ Email from Georgia Macnab, January 28, 2011.

¹⁶ *Final Order on the Application*, pp. 24-27.

¹⁷ *Final Order on Amendment #3 for the Biglow Canyon Wind Farm* (October 31, 2008), pp. 15-19.

¹⁸ The Department interprets "project boundary" as the outer real property line of the collective properties on which the developer has wind development rights. The elements of the ordinance are discussed in the *Final Order on Amendment #3 for the Biglow Canyon Wind Farm* (October 31, 2008), pp. 19-20.

1 otherwise comply with Goal 3, the applicable statewide planning goal. In the *Final Order on*
2 *Amendment #2*, which addressed the wind turbine at location MHI-1, the Council found that
3 the KWP did not comply with OAR 660-033-0130(22) and therefore did not comply with
4 Goal 3.¹⁹ The Council found that an exception to Goal 3 was justified under the criteria for a
5 “reasons” exception in ORS 469.504(2)(c). The rotor replacement at MHI-1 that is proposed
6 in the Request for Amendment #4 would not affect the Council’s previous findings.

7 On January 2, 2009, the Land Conservation and Development Commission (LCDC)
8 amended the administrative rules that implement Goal 3. LCDC adopted amendments to OAR
9 660-033-0120 (Table 1) that added reference to a “wind power generation facility” as a
10 distinct type “R” use. The amendments provided that OAR 660-033-0130(5) and (37) applied
11 to wind power generation facilities.²⁰ The effect of these amendments was to eliminate the 20-
12 acre restriction on wind power generation facilities that is contained in OAR 660-033-0130
13 (22) and to impose, instead, new restrictions on wind power generation facilities contained in
14 OAR 660-033-0130(37).²¹ Construction of the wind turbine at location MHI-1 was complete
15 and the turbine became operational in March 2008. The Council finds that the amendments to
16 OAR 660-033-0120 and OAR 660-033-0130 should not be applied retroactively to a wind
17 turbine that was already in operation when the amendments took effect.

Conclusions of Law

18 For the reasons discussed above, the Council finds that the proposed rotor replacement
19 would not affect the Council’s previous land use findings regarding the turbine at location
20 MHI-1. The Council concludes that the KWP would comply with the Land Use Standard if
21 Amendment #4 were approved.

(b) Soil Protection

OAR 345-022-0022

22 *To issue a site certificate, the Council must find that the design, construction and*
23 *operation of the facility, taking into account mitigation, are not likely to result in a*
24 *significant adverse impact to soils including, but not limited to, erosion and*
25 *chemical factors such as salt deposition from cooling towers, land application of*
26 *liquid effluent, and chemical spills.*
27

Findings of Fact

28 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
29 and #3, the Council found that the design, construction and operation of the KWP would not

¹⁹ *Final Order on Amendment #2*, p. 15.

²⁰ The Council has already addressed OAR 660-033-0130(5) with regard to location MHI-1 and has found that the KWP would not force a significant change in accepted farm practices on surrounding farm land and would not significantly increase the cost of accepted farm practices (*Final Order on Amendment #2*, p. 14). Approval of Amendment #4 would not alter the factual basis for these findings.

²¹ OAR 660-033-0130(37)(a) requires a finding that “reasonable alternatives” to siting a wind power facility on high-value farmland soils have been considered. OAR 660-033-0130(37)(b) applies to “arable” land and requires specific findings regarding “unnecessary negative impacts on agricultural operations,” “unnecessary soil erosion or loss that could limit agricultural productivity,” “unnecessary soil compaction that reduces the productivity of soil for crop production” and “unabated introduction or spread of noxious weeds and other undesirable weeds species.”

1 be likely to result in significant adverse impacts to soils.²² Those findings are incorporated
2 herein by this reference. The proposed rotor replacement would not affect any additional
3 land.²³ No new roads would be constructed. The crane and rotors would be staged on the
4 existing road. Condition 81 requires restoration of any temporary disturbance to adjacent
5 fields that might occur. Approval of Amendment #4 would not otherwise change the facts on
6 which the Council relied in its previous findings regarding impact to soils. The Council finds
7 that the design, construction and operation of the KWP as modified by Amendment #4 would
8 not likely result in significant adverse impact to soils, taking into account the mitigation
9 required by the site certificate conditions.

Conclusions of Law

10 For the reasons discussed above and subject to the site certificate conditions described
11 herein, the Council concludes that the KWP would comply with the Soil Protection Standard
12 if Amendment #4 were approved.

(c) Protected Areas

OAR 345-022-0040

13 *(1) Except as provided in sections (2) and (3), the Council shall not issue a site*
14 *certificate for a proposed facility located in the areas listed below. To issue a site*
15 *certificate for a proposed facility located outside the areas listed below, the*
16 *Council must find that, taking into account mitigation, the design, construction*
17 *and operation of the facility are not likely to result in significant adverse impact to*
18 *the areas listed below. References in this rule to protected areas designated under*
19 *federal or state statutes or regulations are to the designations in effect as of May*
20 *11, 2007:*
21

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

24 *(b) National monuments, including but not limited to John Day Fossil Bed*
25 *National Monument, Newberry National Volcanic Monument and Oregon Caves*
26 *National Monument;*

27 *(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C.*
28 *1131 et seq. and areas recommended for designation as wilderness areas pursuant*
29 *to 43 U.S.C. 1782;*

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

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

²² *Final Order on the Application*, p. 48; *Final Order on Amendment #1*, pp. 25-26; *Final Order on Amendment #2*, p. 16; and *Final Order on Amendment #3*, p. 23.

²³ Request for Amendment #4, Section 3, p. 5.

1 (f) National and state fish hatcheries, including but not limited to Eagle Creek
2 and Warm Springs;

3 (g) National recreation and scenic areas, including but not limited to Oregon
4 Dunes National Recreation Area, Hell's Canyon National Recreation Area, and
5 the Oregon Cascades Recreation Area, and Columbia River Gorge National
6 Scenic Area;

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

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

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

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

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

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

21 Coastal Oregon Marine Experiment Station, Astoria

22 Mid-Columbia Agriculture Research and Extension Center, Hood River

23 Agriculture Research and Extension Center, Hermiston

24 Columbia Basin Agriculture Research Center, Pendleton

25 Columbia Basin Agriculture Research Center, Moro

26 North Willamette Research and Extension Center, Aurora

27 East Oregon Agriculture Research Center, Union

28 Malheur Experiment Station, Ontario

29 Eastern Oregon Agriculture Research Center, Burns

30 Eastern Oregon Agriculture Research Center, Squaw Butte

31 Central Oregon Experiment Station, Madras

32 Central Oregon Experiment Station, Powell Butte

33 Central Oregon Experiment Station, Redmond

34 Central Station, Corvallis

35 Coastal Oregon Marine Experiment Station, Newport

36 Southern Oregon Experiment Station, Medford

1 *Klamath Experiment Station, Klamath Falls;*

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

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

8 *(p) State wildlife areas and management areas identified in OAR chapter*
9 *635, Division 8.*

10 * * *

Findings of Fact

11 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
12 and #3, the Council found that the KWP would not be located in any protected area and that
13 the design, construction and operation of the KWP would not be likely to result in significant
14 adverse impacts to any protected area.²⁴ Those findings are incorporated herein by this
15 reference.

16 Approval of Amendment #4 would allow the certificate holder to replace the rotor on
17 the turbine at location MHI-1. The proposed replacement would have a rotor diameter of 102
18 meters and would increase the maximum blade tip height of the turbine from approximately
19 126 meters to approximately 131 meters. The potential increase in the maximum blade tip
20 height would be approximately 4.75 meters (15.6 feet). This difference in blade tip height
21 does not significantly affect the visibility analysis for turbine location MHI-1 described in the
22 *Final Order on Amendment #2*.²⁵ The rotor replacement that would be allowed by
23 Amendment #4 would not change the facts on which the Council relied in its previous
24 findings regarding potential noise, traffic, water and wastewater impacts on protected areas.
25 The Council finds that approval of Amendment #4 would have no significant adverse effect
26 on any protected area.

Conclusions of Law

27 For the reasons discussed above, the Council concludes that the KWP would comply
28 with the Protected Areas Standard if Amendment #4 were approved.

(d) Scenic Resources

OAR 345-022-0080

29 *(1) Except for facilities described in section (2), to issue a site certificate, the*
30 *Council must find that the design, construction and operation of the facility, taking*
31 *into account mitigation, are not likely to result in significant adverse impact to*
32 *scenic resources and values identified as significant or important in local land use*
33 *plans, tribal land management plans and federal land management plans for any*
34

²⁴ *Final Order on the Application*, p. 53; *Final Order on Amendment #1*, p. 28; *Final Order on Amendment #2*, p. 18; and *Final Order on Amendment #3*, p. 25.

²⁵ *Final Order on Amendment #2*, p. 19.

1 *lands located within the analysis area described in the project order.*

2 * * *

3 Findings of Fact

4 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
5 and #3, the Council found that the design, construction and operation of the KWP would not
6 be likely to result in any significant adverse impacts to scenic resources identified as
7 significant or important.²⁶ Those findings are incorporated herein by this reference.

8 Approval of Amendment #4 would allow the certificate holder to replace the rotor on
9 the turbine at location MHI-1. The proposed replacement would have a rotor diameter of 102
10 meters and would increase the maximum blade tip height of the turbine from approximately
11 126 meters to approximately 131 meters. The potential increase in the maximum blade tip
12 height would be approximately 4.75 meters (15.6 feet).

13 The Council has made specific findings regarding the potential impacts of a wind
14 turbine at location MHI-1 on scenic resources within five miles of the KWP that are identified
15 as significant or important in the applicable management plans.²⁷ The potential increase in
16 blade tip height would not significantly affect the visibility analysis of the turbine. No other
17 wind turbines or facility components would be affected by the proposed amendment.

18 The change that would be allowed if Amendment #4 were approved would not
19 substantially change the facts on which the Council relied in its previous findings regarding
20 visual impacts on identified scenic resources or values. The Council finds that the proposed
21 rotor replacement at turbine location MHI-1 is not likely to result in significant adverse
22 impacts to scenic resources and values identified as significant or important in applicable land
23 management plans.

24 Conclusions of Law

25 For the reasons discussed above, the Council concludes that the KWP would comply
26 with the Scenic Resources Standard if Amendment #4 were approved.

27 **(e) Recreation**

28 **OAR 345-022-0100**

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

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

(b) The degree of demand;

(c) Outstanding or unusual qualities;

²⁶ *Final Order on the Application*, p. 59; *Final Order on Amendment #1*, pp. 29-31; *Final Order on Amendment #2*, p. 19; and *Final Order on Amendment #3*, pp. 25-29.

²⁷ *Final Order on Amendment #2*, p. 19.

1 (d) Availability or rareness;

2 (e) Irreplaceability or irretrievability of the opportunity.

3 * * *

4 Findings of Fact

5 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
6 and #3, the Council found that the design, construction and operation of the KWP would not
7 be likely to result in any significant adverse impacts to recreational opportunities that could be
8 categorized as important under OAR 345-022-0100.²⁸ Those findings are incorporated herein
9 by this reference. Allowing a larger maximum rotor diameter on the wind turbine at location
10 MHI-1 would not affect the facts upon which the Council relied in its previous findings. The
11 Council finds that there has been no change of facts or circumstances that would affect the
12 Council's previous findings regarding the impacts of the KWP on important recreational
opportunities.

Conclusions of Law

13 For the reasons discussed above, the Council concludes that the KWP would comply
14 with the Recreation Standard if Amendment #4 were approved.

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

15 **OAR 345-024-0010**

16 *To issue a site certificate for a proposed wind energy facility, the Council must*
17 *find that the applicant:*

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

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

Findings of Fact

24 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
25 and #3, the Council found that the certificate holder could design, construct and operate the
26 KWP facilities to exclude members of the public from close proximity to the turbine blades
27 and electrical equipment, to preclude structural failure of the tower or blades that could
28 endanger the public safety and to have adequate safety devices and testing procedures.²⁹
29 Those findings are incorporated herein by this reference. To ensure public safety, the Council
30 included Conditions 54, 58, 59, 60, 61, 62, 63, 64 and 98 in the site certificate.

31 Amendment #4 would allow the certificate holder to install a larger rotor on the
32 turbine at location MHI-1. Because there would be no increase in turbine hub height, the

²⁸ *Final Order on the Application*, pp. 59-62; *Final Order on Amendment #1*, pp. 31-32; *Final Order on Amendment #2*, p. 20; and *Final Order on Amendment #3*, pp. 29-30.

²⁹ *Final Order on the Application*, pp. 62-63; *Final Order on Amendment #1*, p. 32; *Final Order on Amendment #2*, pp. 20-21; and *Final Order on Amendment #3*, pp. 30-31.

1 turbine blade tips of the larger rotor would be approximately 29 meters (94.5 feet) above
2 ground at the closest point of rotation, or about 16 feet lower for this turbine than the blade
3 tips of the currently installed rotor. The Council finds that a ground clearance of 29 meters is
4 an adequate distance to protect public safety beneath the turbines.

5 Condition 59 requires a turbine setback distance of 450 feet or 110-percent of the
6 maximum blade tip height, whichever is greater, between the centerline of the turbine tower
7 and the centerline of any public road. The nearest public road is Gosson Lane. The center of
8 the turbine at MHI-1 is 493.6 feet from the centerline of Gosson Lane.³⁰ With the larger rotor
9 diameter requested in Amendment #4, the MHI-1 turbine would have a maximum blade tip
10 height of approximately 430 feet. The minimum setback distance from Gosson Lane,
11 therefore, would be 473 feet. Allowing a 102-meter rotor on the turbine at MHI-1 would
12 comply with the requirements of Condition 59.

13 Except as discussed above, the Council finds that there has been no change of facts or
14 circumstances that would affect the Council's previous findings regarding public health and
15 safety at the KWP site.

Conclusions of Law

16 For the reasons discussed above and subject to site certificate conditions described
17 herein, the Council concludes that the KWP would comply with the Public Health and Safety
18 Standards for Wind Energy Facilities if Amendment #4 were approved.

(g) Siting Standards for Wind Energy Facilities

OAR 345-024-0015

19 *To issue a site certificate for a proposed wind energy facility, the Council must*
20 *find that the applicant can design and construct the facility to reduce cumulative*
21 *adverse environmental effects in the vicinity by practicable measures including,*
22 *but not limited to, the following:*
23

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

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

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

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

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

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

³⁰ Email from Elaine Albrich, October 29, 2010.

Findings of Fact

1 In the *Final Order on the Application* and in the *Final Order on Amendment #1*, the
2 Council found that the certificate holder could design and construct the KWP facilities to
3 reduce visual impact, to restrict public access and to reduce cumulative adverse environmental
4 impacts in the vicinity to the extent practicable in accordance with the former requirements of
5 OAR 345-024-0015 in effect at the time of those decisions.³¹ The Council amended OAR
6 345-024-0015 in May 2007. The Council applied current rule (shown above) in approving
7 Amendment #2 (which added the micrositing area for turbine location MHI-1) and
8 Amendment #3 (which expanded the facility site to accommodate four additional turbine
9 strings and up to 43 additional turbines).³² Both amendments expanded the KWP site. The
10 Council found that the certificate holder could design and construct the expanded KWP
11 facility to reduce cumulative adverse environmental impacts in the vicinity by practicable
12 measures in accordance with the requirements of OAR 345-024-0015. The Council's previous
13 findings are incorporated herein by this reference. The Council has adopted Conditions 63,
14 64, 78, 84, 90, 98 and 100 to mitigate the cumulative adverse environmental effects of the
15 facility.

16 Amendment #4 would allow the certificate holder to install a larger rotor on the
17 turbine at location MHI-1, but would not expand the facility site. The amendment would not
18 increase the cumulative length of facility access roads or transmission lines. The amendment
19 would not add a new substation or significantly affect facility lighting or other visual impacts
20 of the facility. The amendment would increase the rotor swept area of a single turbine at
21 location MHI-1 but would not significantly increase the cumulative risk of injury to raptors or
22 other vulnerable wildlife in areas near facility turbines or electrical equipment.³³

Conclusions of Law

23 For the reasons discussed above and subject to the site certificate conditions described
24 herein, the Council finds that the change requested by Amendment #4 would not affect the
25 certificate holder's ability to design and construct the KWP facility to reduce cumulative
26 environmental effects in the vicinity by practicable measures. The Council concludes that the
27 KWP would comply with the Siting Standards for Wind Energy Facilities, if Amendment #4
28 were approved.

(h) Siting Standards for Transmission Lines

OAR 345-024-0090

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

31
32 *(1) Can design, construct and operate the proposed transmission line so that*
33 *alternating current electric fields do not exceed 9 kV per meter at one meter above*
34 *the ground surface in areas accessible to the public;*

³¹ *Final Order on the Application*, pp. 63-66; *Final Order on Amendment #1*, pp. 32-35.

³² *Final Order on Amendment #2*, pp. 21-22; *Final Order on Amendment #3*, pp. 31-33.

³³ The rotor-swept area (RSA) is the vertical range between the minimum blade clearance above ground and the maximum blade tip height. The RSA identifies a zone of potential risk to avian species flying near a wind turbine. Based on the MHI-1 tower height of 80 meters, the proposed amendment would increase the RSA by 9.5 meters (reducing ground clearance by 4.75 meters and increasing the maximum blade tip height by 4.75 meters).

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

Findings of Fact

4 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
5 and #3, the Council found that the certificate holder could design, construct and operate the
6 KWP facility transmission lines in accordance with the standards described in OAR 345-024-
7 0090.³⁴ Those findings are incorporated herein by this reference. The Council has adopted
8 Conditions 18, 84, 87 and 88 to minimize hazards to the public from electric fields around
9 transmission lines. The proposed amendment would not increase the length of transmission
10 lines at the KWP facility or otherwise affect transmission line construction or operation.

Conclusions of Law

11 For the reasons discussed above and subject to the site certificate conditions described
12 herein, the Council concludes that the KWP would comply with the Siting Standards for
13 Transmission Lines if Amendment #4 were approved.

4. Standards to Protect Wildlife

(a) Threatened and Endangered Species

OAR 345-022-0070

14 *To issue a site certificate, the Council, after consultation with appropriate state*
15 *agencies, must find that:*
16

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

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

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

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

Findings of Fact

30 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
31 and #3, the Council found that the design, construction and operation of the KWP facility
32 would not have the potential to significantly reduce the likelihood of the survival or recovery
33 of any Threatened or Endangered plant or wildlife species listed under Oregon law.³⁵ Those

³⁴ *Final Order on the Application*, pp. 66-67; *Final Order on Amendment #1*, pp. 35-36; *Final Order on Amendment #2*, p. 23; and *Final Order on Amendment #3*, pp. 33-34.

³⁵ *Final Order on the Application*, pp. 68-72; *Final Order on Amendment #1*, pp. 36-38; *Final Order on*

1 findings are incorporated herein by this reference. The proposed amendment would not
2 expand the site boundary, increase the permanent footprint of the facility or disturb any native
3 habitat. The amendment would increase the rotor swept area of a single turbine at location
4 MHI-1 by 9.5 meters (approximately 32 feet) but would not significantly increase the
5 cumulative risk of injury to Threatened or Endangered species.

Conclusions of Law

6 For the reasons discussed above, the Council concludes that the KWP would comply
7 with the Threatened and Endangered Species Standard if Amendment #4 were approved.

(b) Fish and Wildlife Habitat

OAR 345-022-0060

8 *To issue a site certificate, the Council must find that the design, construction and*
9 *operation of the facility, taking into account mitigation, are consistent with the fish*
10 *and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect*
11 *as of September 1, 2000.*
12

Findings of Fact

13 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
14 and #3, the Council found that the design, construction and operation of the KWP would be
15 consistent with the Oregon Department of Fish and Wildlife habitat mitigation goals and
16 standards.³⁶ The Council made findings regarding the characteristics of the habitat types
17 within the site boundary. The Council made findings regarding potential habitat impacts and
18 mitigation requirements. Those findings are incorporated herein by this reference. The
19 Council adopted Conditions 9, 79, 81, 89, 90, 92, 93, 94, 95, 96 and 97 to mitigate the
20 impacts of the facility on wildlife habitat.

21 The proposed amendment would not expand the site boundary, increase the permanent
22 footprint of the facility or disturb any native habitat. The amendment would not affect the
23 Council's previous findings regarding the impacts of the design, construction and operation of
24 the facility on wildlife habitat.

Conclusions of Law

25 For the reasons discussed above and subject to the site certificate conditions described
26 herein, the Council finds that the proposed rotor replacement would not affect the Council's
27 previous findings that the design, construction and operation of the KWP are consistent with
28 the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025. The
29 Council concludes that the KWP would comply with the Fish and Wildlife Habitat Standard if
30 Amendment #4 were approved.

5. Standards Not Applicable to Site Certificate Eligibility

31 Under ORS 469.501(4), the Council may issue a site certificate without making the
32 findings required by the standards discussed in this section (Structural Standard, Historic,

Amendment #2, pp. 23-24; and Final Order on Amendment #3, pp. 34-35.

³⁶ *Final Order on the Application, pp. 72-85; Final Order on Amendment #1, pp. 38-41; Final Order on Amendment #2, pp. 25-26; and Final Order on Amendment #3, pp. 35-38.*

1 Cultural and Archaeological Resources Standard, Public Services Standard and Waste
2 Minimization Standard).³⁷ Nevertheless, the Council may impose site certificate conditions
3 based on the requirements of these standards.

(a) Structural Standard

OAR 345-022-0020

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

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

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

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

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

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

* * *

Proposed Conditions

In the *Final Order on the Application* and in the final orders on Amendments #1, #2 and #3, the Council made findings regarding site-specific characterization of seismic, geologic and soil hazards for the KWP.³⁸ Those findings are incorporated herein by this reference. The Council adopted Conditions 12, 13, 14, 53, 54, 55, 76 and 82 to address

³⁷ 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.

³⁸ *Final Order on the Application*, pp. 85-87; *Final Order on Amendment #1*, pp. 41-42; *Final Order on Amendment #2*, pp. 27-28; and *Final Order on Amendment #3*, pp. 39-40.

1 potential seismic and non-seismic geologic hazards at the facility site. The proposed
2 amendment would not expand the site boundary or alter the permanent footprint of the
3 facility. The amendment would not expose the facility or the public to geological hazards that
4 were not previously considered by the Council. The Council finds that no changes to the site
5 certificate conditions related to the Structural Standard are needed.

(b) Historic, Cultural and Archaeological Resources

OAR 345-022-0090

6
7 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate,*
8 *the Council must find that the construction and operation of the facility, taking*
9 *into account mitigation, are not likely to result in significant adverse impacts to:*

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

12 *(b) For a facility on private land, archaeological objects, as defined in ORS*
13 *358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and*

14 *(c) For a facility on public land, archaeological sites, as defined in ORS*
15 *358.905(1)(c).*

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

20 * * *

Proposed Conditions

21 In the *Final Order on the Application* and in the final orders on Amendments #1, #2
22 and #3, the Council made findings regarding historic, cultural and archaeological resources
23 within the facility site.³⁹ Those findings are incorporated herein by this reference. The Council
24 adopted Conditions 48 through 52 to protect historic, cultural and archaeological resources.
25 The proposed amendment would not expand the site boundary or disturb any areas that were
26 not previously surveyed for these resources. The Council finds that no changes to the site
27 certificate conditions related to the Historic, Cultural and Archaeological Standard are needed.

(c) Public Services

OAR 345-022-0110

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

³⁹ *Final Order on the Application*, pp. 87-89; *Final Order on Amendment #1*, pp. 42-44; *Final Order on Amendment #2*, pp. 28-29; and *Final Order on Amendment #3*, pp. 40-42.

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

5 * * *

Proposed Conditions

6 In the *Final Order on the Application*, the Council discussed the public service
7 impacts of construction and operation of the KWP regarding sewage, storm water, solid
8 waste, water supply, housing, police and fire protection, health care, schools and traffic
9 safety.⁴⁰ The Council found that the impacts would not be significant. Those findings are
10 incorporated herein by this reference. Conditions adopted to address other Council standards
11 adequately address the Council's concerns under the Public Service Standard.⁴¹ In its
12 subsequent final orders on amendments to the KWP site certificate, the Council found that no
13 new or modified site certificate conditions were needed.⁴²

14 The rotor replacement that would be allowed under Amendment #4 would not increase
15 the number employees during construction or operation. The amendment would not change
16 the quantity of solid waste, wastewater or storm water. The amendment would not increase
17 traffic volume on nearby roads during construction or operation compared to traffic volumes
18 without the amendment. The requested changes would not significantly increase the level of
19 fire risk or the need for other emergency response. For these reasons, the Council finds that no
20 changes to the site certificate conditions related to the Public Services Standard are needed.

(d) Waste Minimization

OAR 345-022-0120

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

23 (a) *The applicant's solid waste and wastewater plans are likely to minimize*
24 *generation of solid waste and wastewater in the construction and operation of the*
25 *facility, and when solid waste or wastewater is generated, to result in recycling*
26 *and reuse of such wastes;*

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

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

34 * * *

⁴⁰ *Final Order on the Application*, pp. 89-92.

⁴¹ Conditions that address the issues under the Public Service Standard include Conditions 39, 40, 41, 44, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 78, 79, 80, 82, 83, 103, 104, 105, 106 and 107.

⁴² *Final Order on Amendment #1*, p. 44; *Final Order on Amendment #2*, p. 29; and *Final Order on Amendment #3*, pp. 43.

Proposed Conditions

1 In the *Final Order on the Application*, the Council adopted Conditions 105, 106 and
2 107, which address solid waste management on the site during construction and operation.⁴³
3 The Council adopted Conditions 73 and 74, which address proper handling of hazardous
4 materials and response to spills and accidental releases of hazardous materials. Conditions 80,
5 83, 103 and 104 address industrial and sanitary wastewater during construction and operation.
6 The rotor replacement that would be allowed under Amendment #4 would not increase the
7 amount of solid waste and wastewater generated during construction and operation, and
8 would not affect site certificate conditions related to the Waste Minimization Standard. The
9 Council finds that no new or modified conditions are required.

V. OTHER APPLICABLE REGULATORY REQUIREMENTS: FINDINGS AND CONCLUSIONS

1. Requirements under Council Jurisdiction

10 Under ORS 469.503(3) and under the Council’s General Standard of Review (OAR
11 345-022-0000), the Council must determine whether a facility complies with “all other
12 Oregon statutes and administrative rules identified in the project order, as amended, as
13 applicable to the issuance of a site certificate for the proposed facility.” The other Oregon
14 statutes and administrative rules that are applicable to the changes requested in Amendment
15 #4 include the Department of Environmental Quality (DEQ) noise control regulations and the
16 Council’s statutory authority to consider protection of public health and safety.

17 In addressing the site certificate application and the certificate holder’s requests for
18 Amendments #1, #2 and #3, the Council has previously considered the regulations adopted by
19 the Department of State Lands for removal or fill of material affecting waters of the state, the
20 Oregon Water Resources Department’s regulations for water rights and the Oregon
21 Department of Transportation’s regulations for access to state highways and utility crossings
22 on state highways. These regulations are not applicable to the Request for Amendment #4,
23 which involves no change in the site boundary, no removal or fill of materials in any state
24 waters, no new use of water and no new state highway access or utility crossing. These
25 regulations, therefore, are not discussed in this order.

(a) Noise Control Regulations

26 The applicable noise control regulations are as follows:

27 **OAR 340-035-0035**
28 **Noise Control Regulations for Industry and Commerce**
29 *(1) Standards and Regulations:*

30 * * *

31 *(b) New Noise Sources:*

32 * * *

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

34 *(i) No person owning or controlling a new industrial or commercial*
35 *noise source located on a previously unused industrial or commercial site shall*

⁴³ *Final Order on the Application*, pp. 92-94.

1 *cause or permit the operation of that noise source if the noise levels generated or*
2 *indirectly caused by that noise source increase the ambient statistical noise levels,*
3 *L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in*
4 *Table 8, as measured at an appropriate measurement point, as specified in*
5 *subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).*

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

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

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

17 *(II) The "actual ambient background level" is the measured noise*
18 *level at the appropriate measurement point as specified in subsection (3)(b) of this*
19 *rule using generally accepted noise engineering measurement practices.*
20 *Background noise measurements shall be obtained at the appropriate*
21 *measurement point, synchronized with windspeed measurements of hub height*
22 *conditions at the nearest wind turbine location. "Actual ambient background*
23 *level" does not include noise generated or caused by the wind energy facility.*

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

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

43 *(V) For purposes of determining whether an operating wind energy*
44 *facility complies with the ambient noise standard where a landowner has not*
45 *waived the standard, noise levels at the appropriate measurement point are*
46 *measured when the facility's nearest wind turbine is operating over the entire*

1 range of wind speeds between cut-in speed and the windspeed corresponding to
2 the maximum sound power level and no turbine that could contribute to the noise
3 level is disabled. The facility complies with the noise ambient background
4 standard if the increase in noise over either the assumed ambient noise level of 26
5 dBA or to the actual ambient background L10 and L50 noise level, if measured, is
6 not more than 10 dBA over this entire range of wind speeds.

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

13 (VII) For purposes of determining whether an operating wind
14 energy facility satisfies the Table 8 standards, noise generated by the energy
15 facility is measured at the appropriate measurement point when the facility's
16 nearest wind turbine is operating at the windspeed corresponding to the maximum
17 sound power level and no turbine that could contribute to the noise level is
18 disabled.

19 * * *

Findings of Fact

20 In the *Final Order on the Application*, the Council found that noise levels generated
21 by the proposed facility would not exceed the "maximum allowable" (Table 8) test described
22 in OAR 340-035-0035(1)(b)(B) at any of seven noise sensitive receivers that have the
23 potential of receiving noise from the proposed facility.⁴⁴ The Council found, however, that the
24 predicted noise levels at five of the seven receivers would exceed the "ambient degradation"
25 limit described in the regulation. To ensure compliance with the regulation, the Council
26 adopted Condition 102. Under the condition, facility noise levels could exceed the ambient
27 degradation limit if the certificate holder obtains a legally effective easement or real covenant
28 (a "waiver") from each of the affected landowners authorizing an increase in ambient
29 statistical noise levels L₁₀ and L₅₀ by more than 10 dBA. For those properties for which the
30 landowner would not sign a waiver, Condition 102 requires the certificate holder to identify
31 the final turbine locations and provide a noise analysis that demonstrates that the facility
32 would comply with the 10-dBA limit.

33 Before beginning construction of the turbines authorized by the *Final Order on the*
34 *Application*, the certificate holder submitted a noise analysis that served as the final
35 preconstruction noise analysis that was required under Condition 102 and also served to
36 support the certificate holder's Request for Amendment #1.⁴⁵

37 In the Request for Amendment #1, the certificate holder asked the Council to allow the
38 use of larger wind turbines (having a higher sound power level) in strings K, L, M, N, R, S, U,
39 V, W and X. The certificate holder submitted noise waivers from the owners of four of the
40 five properties where the noise levels were predicted to exceed the ambient degradation

⁴⁴ *Final Order on the Application*, pp. 94-100.

⁴⁵ TW Environmental, Inc., *Preconstruction Report for the Amended Klondike III Wind Project*, submitted to the Department on August 22, 2006.

1 limit.⁴⁶ The Council found that operation of the facility would not exceed the ambient
2 degradation standard at the remaining property (R5) if the J-string turbines were constructed
3 in specified locations, if turbines F-05, -06, -07, -08 and J-01 were not built and if turbines F-
4 01, -02, -03 and 04 were built no closer to R5 than the worst-case locations.⁴⁷ The Council
5 amended Condition 102 to incorporate these restrictions and, as an alternative, to allow the
6 certificate holder to present data to the Department before beginning construction that would
7 demonstrate that the facility would not generate noise in excess of 36 dBA at R5 when the F
8 and J-string turbines were placed in their final design locations.⁴⁸ The certificate holder later
9 renumbered property R5; it is now identified as “R3.”⁴⁹

10 In the Request for Amendment #2, the certificate asked the Council to approve the
11 construction and operation of a wind turbine at location MHI-1 that would have a maximum
12 sound power level not exceeding 110 dBA. The certificate holder had obtained a waiver from
13 the owner of the property closest to location MHI-1 (property R2). The Council found that the
14 KWP would comply with the applicable noise regulations if Amendment #2 were approved.⁵⁰
15 The Council approved the amendment.⁵¹ The certificate holder later renumbered property R2;
16 it is now identified as “R13.”⁵²

17 In the Request for Amendment #3, the certificate holder asked the Council to approve
18 the construction and operation of additional wind turbine strings and the re-alignment of
19 previously-approved turbine strings. The certificate holder provided a noise analysis that
20 assumed that the turbines in the proposed new turbine strings Y, Z, AA and BB would have a
21 maximum sound power level of 110 dBA and that the turbines in the proposed re-aligned
22 micro-siting corridors for turbine strings N and U would also have a maximum sound power
23 level of 110 dBA. The analysis assumed that the turbine to be constructed in location MHI-1
24 (approved by the Council in Amendment #2) would have a maximum sound power level of
25 110 dBA.

26 The certificate holder’s noise analysis identified ten noise sensitive receivers that
27 could be affected by noise from the facility if Amendment #3 were approved, including five
28 receivers that the certificate holder had not previously identified.⁵³ Based on observations of
29 possible additional noise receptors by the Department’s expert noise consultant, Kerrie
30 Standlee of Daly Standlee and Associates, the Department asked the certificate holder to
31 identify all noise sensitive properties within one mile of the lease boundary. In response to
32 this request, the certificate holder submitted a revised noise analysis showing the predicted
33 noise levels at 18 of 20 identified noise sensitive properties.⁵⁴ The predicted noise levels for

⁴⁶ Request for Amendment #1, Appendix X-1.

⁴⁷ *Final Order on Amendment #1*, p. 50. The J-string “specified locations” were described in Table 7 of the order.

⁴⁸ The restrictions would not apply if the certificate holder obtained a waiver from the property owner.

⁴⁹ *Final Order on Amendment #3*, pp. 47-48.

⁵⁰ *Final Order on Amendment #2*, p. 33.

⁵¹ *Final Order on Amendment #2*, p. 47.

⁵² *Final Order on Amendment #3*, pp. 47-48.

⁵³ TW Environmental, Inc., *Noise Analysis for the Klondike IIIa Wind Project*, June 2007, Table 4 (Request for Amendment #3, Appendix X-1, p. 9).

⁵⁴ E-mail from Jesse Gronner, October 4 and 9, 2007. The analysis was comprised of two documents: “PPMK3anoise_oct42007.doc” and “PPMKIIIa noise_Oct 9.xls.” Analysis of the predicted noise levels at the remaining two properties was provided in the *Preconstruction Report for the Amended Klondike III Wind*

1 all 20 properties are shown in Table 5 of the *Final Order on Amendment #3*.⁵⁵ The predicted
2 noise levels would exceed the ambient degradation limit at 11 of the 20 properties. The
3 certificate holder submitted noise waivers for six of the properties (R4, R10, R11, R12, R13
4 and R15).⁵⁶ The Council revised Condition 102 to require the certificate holder to obtain noise
5 waivers for the remaining five properties or to modify the facility configuration and provide a
6 new noise analysis demonstrating compliance with the noise limits.⁵⁷

7 The certificate holder obtained noise waivers for four of the five properties (R6, R7,
8 R8 and R14) to comply with the requirements of Condition 102(c).⁵⁸ The certificate holder
9 did not obtain a noise waiver for property R3 (formerly R5, discussed above) but to comply
10 with Condition 102(a), the certificate holder has built turbines in the nearby micro-siting
11 corridors substantially in conformance with the restrictions previously described in Condition
12 102(b) of the *Final Order on Amendment #2*.⁵⁹ The certificate holder has not built turbines F-
13 05, F-06, F-07, F-08 or J-01. The certificate holder retains the option to obtain a waiver from
14 the landowner for building turbines at these locations.⁶⁰

15 The proposed amendment would authorize the use of a larger rotor on the turbine at
16 location MHI-1, but the amendment would not raise the 110-dBA limit on the turbine's
17 maximum sound power level that is imposed under Condition 28. The turbine manufacturer
18 states that the maximum sound power level of the turbine with the 102-meter replacement
19 rotor would be the same as the maximum sound power level of the turbine with the 92.5-
20 meter rotor that is currently in place.⁶¹ Because the authorized maximum sound power level
21 would not change, the proposed turbine rotor replacement would have no effect on the noise
22 modeling analysis discussed in the *Final Order on Amendment #3*.⁶²

23 The Department's noise consultant, Kerrie Standlee, reviewed the noise analysis
24 contained in the Request for Amendment #4. Standlee found that, with the noise waivers
25 obtained for the facility, the noise generated by the facility would remain in compliance with

Project, submitted to the Department on August 22, 2006.

⁵⁵ The Department's noise consultant, Kerrie Standlee, reviewed the certificate holder's noise analysis and concurred in the results shown in Table 5.

⁵⁶ E-mail from Jesse Gronner, October 10, 2007. A waiver covering properties R10 and R11 (formerly numbered R6) was submitted in Appendix X-1, Request for Amendment #1. Waivers for R4, R12 (formerly R7), R13 (formerly R2) and R15 (formerly R3) were submitted as attachments to e-mail from Jesse Gronner, August 29, 2006.

⁵⁷ *Final Order on Amendment #3*, pp. 65-67.

⁵⁸ Non-recorded copies of the waivers were submitted to the Department on June 12, 2008, as attachments to 2008 Annual Report follow-up submittal. Recorded copies were later submitted (email from Sara Parsons, December 30, 2010, and January 11, 2011).

⁵⁹ The certificate holder has built turbines J2 through J-13 within a 16-foot variance from the locations specified in Table 7 of the *Final Order on Amendment #1*. The variance would not have a significant effect on the predicted noise levels at property R3. The certificate holder has built turbines F-1, F-2, F-3 and F-4 at least 7,990 feet away from R3. Email from Sara Parsons, October 11, 2007.

⁶⁰ E-mail from Jesse Gronner, October 11, 2007.

⁶¹ Request for Amendment #4, Attachment 2, p. 1.

⁶² *Final Order on Amendment #3*, pp. 45-49. The certificate holder performed a hypothetical analysis that assumed a maximum sound power level of 115 dBA at MHI-1 and concluded that the facility would still be in compliance with the 50-dBA maximum allowable noise level at R13 (Request for Amendment #4, Attachment 2, p. 3). R13 is the property having the highest noise impact from the facility as shown in Table 5 of the *Final Order on Amendment #3*.

1 the DEQ noise regulation limits at all receptors if the proposed rotor replacement at MHI-1
2 were allowed.

Conclusions of Law

3 For the reasons discussed above and subject to the site certificate conditions described
4 herein, the Council finds that the KWP would comply with the applicable noise control
5 regulations if Amendment #4 were approved.

(b) Public Health and Safety

6 Under ORS 469.310, the Council is charged with ensuring that the “siting,
7 construction and operation of energy facilities shall be accomplished in a manner consistent
8 with protection of the public health and safety.” ORS 469.401(2) requires that “the site
9 certificate shall contain conditions for the protection of the public health and safety.”

Findings of Fact

10 We discuss the Public Health and Safety Standards for Wind Energy Facilities (OAR
11 345-024-0010) above at page 15. In this section, we discuss the issues of fire protection,
12 magnetic fields and coordination with the Oregon Public Utility Commission (PUC).

A. Fire Protection

13 In the *Final Order on the Application*, the Council made findings and adopted
14 Conditions 63, 65, 66, 67, 68, 69 and 70 regarding fire prevention and emergency response
15 for the KWP facility.⁶³ The Council’s previous findings are incorporated herein by reference.
16 The rotor replacement proposed by Amendment #4 would not result in new fire risks that are
17 different from the types of risk already considered by the Council in previous orders. The
18 Council finds that no new or revised fire protection conditions are needed.

B. Magnetic Fields

19 Electric transmission lines create both electric and magnetic fields. The electric fields
20 associated with the transmission line components of the KWP are addressed by the Siting
21 Standards for Transmission Lines (OAR 345-024-0090), discussed above at page 17. In the
22 *Final Order on the Application*, the Council made findings regarding the magnetic fields that
23 could be produced by the facility’s 230-kV and 34.5-kV transmission lines.⁶⁴ Those findings,
24 incorporated herein by reference, include references to scientific literature on the potential
25 health effects from exposure to magnetic fields. The Council adopted Conditions 87 and 88,
26 which address measures to reduce or manage human exposure to electromagnetic fields from
27 transmission lines. In the Request for Amendment #1, the certificate holder eliminated the
28 230-kV transmission line from the facility.⁶⁵ The certificate holder does not propose
29 construction of any new transmission lines in the current amendment request. The proposed
30 rotor replacement would not affect the Council’s previous findings regarding magnetic fields
31 generated by transmission lines at the facility. The Council finds that no new or revised
32 conditions related to electromagnetic fields are needed.

⁶³ *Final Order on the Application*, p. 103.

⁶⁴ *Final Order on the Application*, pp. 103-104.

⁶⁵ *Final Order on Amendment #1*, p. 2.

C. Coordination with the PUC

1 The PUC Safety and Reliability Section has requested that the Council ensure that
2 certificate holders coordinate with PUC staff on the design and specifications of electrical
3 transmission lines. Condition 85 requires the certificate holder to consult with the PUC before
4 construction of transmission lines at the KWP facility. The certificate holder does not propose
5 construction of any new transmission lines in the current amendment request. The Council
6 finds that no new or revised conditions regarding consultation with the PUC are needed.

Conclusions of Law

7 Based on the findings discussed above, the Council concludes that the KWP would
8 comply with requirements to protect public health and safety, if Amendment #4 were
9 approved.

2. Requirements That Are Not Under Council Jurisdiction

(a) Federally-Delegated Programs

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

(b) Requirements That Do Not Relate to Siting

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

VI. GENERAL APPLICATION OF CONDITIONS

23 The conditions referenced in this order include conditions that are specifically required
24 by OAR 345-027-0020 (Mandatory Conditions in Site Certificates), OAR 345-027-0023 (Site
25 Specific Conditions), OAR 345-027-0028 (Monitoring Conditions) or OAR Chapter 345,
26 Division 26 (Construction and Operation Rules for Facilities). The conditions referenced
27 herein include conditions based on representations in the request for amendment and the
28 supporting record. The Council deems these representations to be binding commitments made
29 by the certificate holder. Also included are conditions the Council finds necessary to ensure
30 compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, or to protect
31 public health and safety.

32 In addition to all other conditions referenced or included in this order, the site
33 certificate holder is subject to all conditions and requirements contained in the rules of the
34 Council and in local ordinances and state law in effect on the date the amended site certificate

1 is executed.⁶⁶ Under ORS 469.401(2), upon a clear showing of a significant threat to the
2 public health, safety or the environment that requires application of later-adopted laws or
3 rules, the Council may require compliance with such later-adopted laws or rules.

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

VII. GENERAL CONCLUSION

8 The proposed amendment would allow the certificate holder to replace the rotor on the
9 wind turbine at location MHI-1 with a rotor that is larger in diameter than the rotor previously
10 allowed under Condition 28. The Department has recommended that the Council adopt
11 revisions to the site certificate as described in the section that follows.

12 Based on the findings and conclusions discussed above regarding the proposed
13 amendment, the Council makes the following findings:

- 14 1. The proposed Amendment #4 complies with the requirements of the Oregon
15 Energy Facility Siting statutes, ORS 469.300 to ORS 469.570 and 469.590 to
16 469.619.
- 17 2. The proposed Amendment #4 complies with the standards adopted by the Council
18 pursuant to ORS 469.501.
- 19 3. The proposed Amendment #4 complies with all other Oregon statutes and
20 administrative rules applicable to the amendment of the site certificate for the
21 Klondike III Wind Project and within the Council's jurisdiction.

22 Accordingly, the Council finds that the facility, with the changes allowed under
23 Amendment #4, complies with the General Standard of Review (OAR 345-022-0000). The
24 Council concludes, based on a preponderance of the evidence on the record, that the site
25 certificate may be amended as requested by the certificate holder, subject to the revisions
26 recommended by the Department and set forth below.

1. The Department's Recommended Revisions

27 New text proposed by the Department is shown with a single underline. New text
28 proposed by the certificate holder with concurrence by the Department is shown with a double
29 underline. Deletions are shown with a strikethrough. Text proposed by the certificate holder
30 but not recommended by the Department is not shown.⁶⁷ 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 *Third Amended Site Certificate for*
33 *the Klondike III Wind Project* (November 16, 2007).

⁶⁶ With regard to land use, the applicable local criteria are those in effect on the date the certificate holder submitted the request for amendment.

⁶⁷ The certificate holder proposed changes to the site certificate as shown in a red-line markup of the site certificate (Request for Amendment #4, Attachment 1).

Revision 1

1 *Page 1, lines 6-14:*

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 related to the facility, which are
4 incorporated herein by this reference: (a) the ~~Council's Final Order on the Application for the~~
5 facility issued on June 30, 2006 and (b) the ~~Council's Final Orders on Amendments #1, #2,~~
6 and #3 and #4. In interpreting this site certificate, any ambiguity will be clarified by reference
7 to the following, in order of priority: (1) this ~~Fourth~~Third Amended Site Certificate, (2) the
8 Final Order on Amendment #4, (3) the Final Order on Amendment #3, ~~(34) the Final Order~~
9 ~~on Amendment #2~~, ~~(45) the Final Order on Amendment #1~~, ~~(56) the Final Order on the~~
10 ~~Application and (67) the record of the proceedings that led to the Final Orders on the~~
11 ~~Application, Amendments #1, Amendment #2, and Amendment #3 and #4~~. [Amendments #1,
12 ~~#2 and, #3 and #4~~]

Revision 1 Explanation

13 This revision includes a reference in the site certificate to the findings of fact,
14 reasoning and conclusions in support of the present amendment. The revision establishes the
15 order of priority in which the underlying documents should be considered in resolving any
16 ambiguity.

Revision 2

17 *Page 1, lines 25-31:*

18 3. This site certificate does not address, and is not binding with respect to, matters that were
19 not addressed in the Council's Final Orders on the Application and Amendments #1, #2
20 and, #3 and #4. Such matters include, but are not limited to: building code compliance,
21 wage, hour and other labor regulations, local government fees and charges and other
22 design or operational issues that do not relate to siting the facility (ORS 469.401(4)) and
23 permits issued under statutes and rules for which the decision on compliance has been
24 delegated by the federal government to a state agency other than the Council. 469.503(3).
25 [Amendments #1, #2 ~~and, #3 and #4~~]

Revision 2 Explanation

26 The revision adds the matters addressed in the *Final Order on Amendment #4* to the
27 scope of matters addressed in the site certificate.

Revision 3

28 *Page 2, lines 22-29:*

29 The energy facility is an electric power generating plant with an average electric generating
30 capacity of approximately 125 megawatts and a peak generating capacity of not more than 375
31 megawatts that produces power from wind energy. The facility consists of not more than 208
32 wind turbines. The energy facility is described further in the Final Orders on Amendments #1,
33 #2 and, #3 and #4. [Amendments #1, #2 ~~and, #3 and #4~~]

Revision 3 Explanation

34 This revision adds a reference to the additional energy facility description in the *Final*
35 *Order on Amendment #4*.

Revision 4

1 Page10, lines 15-42:

2 (28) The certificate holder shall construct a facility that includes up to 208 wind turbines
3 substantially as described in the site certificate, subject to the following restrictions on
4 turbine selection and subject to the requirements of Condition 102:

5 (a) For any turbine string, the certificate holder may select any combination of GE
6 1.5-megawatt or Vestas V82 1.65-megawatt wind turbines.

7 (b) For turbine strings K, L, M, R, S, V, W and X as identified in Table 1 of the
8 *Final Order on Amendment #1*, in addition to the turbine types listed in (a), the
9 certificate holder may select any turbine type such that the hub height does not exceed
10 80 meters, the rotor diameter does not exceed 92.5 meters, the peak generating capacity
11 does not exceed 2.4 megawatts and the maximum sound power level does not exceed
12 107 dBA, including uncertainty.

13 (c) Notwithstanding the restriction described in (b) and in addition to the turbine
14 types listed in (a), the certificate holder may select any turbine type for locations K-02 as
15 shown on Figure B-1 as described in the *Final Order on Amendment #1* or MHI-1 as
16 described in the *Final Order on Amendment #2*, such that the hub height does not exceed
17 80 meters, the rotor diameter does not exceed 92.5 meters for location K-02 or 102
18 meters for location MHI-1, the peak generating capacity does not exceed 2.4 megawatts
19 and the maximum sound power level does not exceed 110 dBA including uncertainty.

20 (d) For turbine strings N, U, Y, Z, AA and BB as shown on Figure 1 as described in
21 the *Final Order on Amendment #3*, the certificate holder may select any turbine type
22 such that the hub height does not exceed 100 meters, the rotor diameter does not exceed
23 100 meters, the peak generating capacity does not exceed 3.0 megawatts and the
24 maximum sound power level does not exceed 110 dBA, including uncertainty, subject to
25 the requirements of Condition 102.

26 (e) Before beginning construction of turbines, the certificate holder shall identify the
27 turbine types selected for construction and provide evidence satisfactory to the
28 Department that the selected turbine types comply with this condition.

29 [Amendments #1, #2 ~~and~~, #3 and #4]

Revision 4 Explanation

30 This revision modifies the restriction on the rotor diameter for the turbine located at
31 MHI-1. The revised condition would allow the certificate holder to replace the rotor on that
32 turbine with a rotor having a diameter of up to 102 meters. Other than modifying this size
33 limit, the condition is unchanged.

VIII. ORDER

1 The Council approves Amendment #4 and issues an amended site certificate for the
2 Klondike III Wind Project, subject to the terms and conditions set forth above.

Issued this 25th day of March, 2011.

THE OREGON ENERGY FACILITY SITING COUNCIL

By: W. Bryan Wolfe
W. Bryan Wolfe, Chair
Oregon Energy Facility Siting Council

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.