Request for Amendment No. 1 to the Site Certificate for the Helix Wind Power Facility

Prepared for

Oregon Energy Facility Siting Council

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Prepared by

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SECTION 1

Introduction

Iberdrola Renewables, Inc. (IBR) obtained a site certificate on July 31, 2009, to construct the Helix Wind Power Facility (HWPF) in Umatilla County, Oregon, with up to 60 turbines and a generating capacity of up to 102 megawatts (MW).

1.1 Purpose of Proposed Amendment

The purpose of this proposed amendment to the HWPF site certificate is to: (1) transfer the site certificate to Helix Wind Power Facility, LLC, a wholly-owned subsidiary of IBR; (2) increase the peak generating capacity approved under the site certificate to 201 MW; and (3) expand the approved site boundary to allow for the additional turbines and generating capacity.

Because it is envisioned that the transfer of the site certificate will occur as a part of this amendment request, the term "certificate holder" throughout this request refers to Helix Wind Power Facility, LLC. Under the authority of the July 31, 2009, site certificate, Helix Wind Power Facility, LLC, is preparing to start construction of HWPF beginning in 2010. The certificate holder intends to continue construction into the expanded site boundary upon Energy Facility Siting Council (EFSC) approval of the amended site certificate. Any construction that occurs under the authority of the current site certificate will be confined to the approved site boundary described in the Final Order for HWPF (July 31, 2009) and will comply with the site certificate conditions. If the EFSC approves this amendment request, the certificate holder will construct up to 134 turbines and 201 MW within the proposed expanded HWPF as defined in Section 1.2.

Figure 1 (Attachment 1) shows the overall location of HWPF and distinguishes the proposed expanded site boundary from the previously-approved site boundary as defined in Section 1.2.

1.2 Definition of Terms

The certificate holder considers HWPF to be a single energy facility and intends to construct it as one project. However, for ease in differentiating between the approved HWPF and modifications proposed in this amendment request, the following terms are used:

- Site boundary authorized under *Site Certificate for the Helix Wind Power Facility* (July 31, 2009) is referred to as "previously-approved site boundary"
- HWPF authorized under site certificate is referred to as "previously-approved HWPF"
- Proposed site boundary expansion is referred to as "proposed expanded site boundary," "proposed expansion," or "new area"

- Amended facility and site boundary are referred to collectively as "proposed expanded HWPF" or "HWPF, as expanded under the proposed amendment"

1.3 Summary of Modifications

As enumerated in Section 1.1 and further described in Sections 1.3.1 through 1.3.3, this amendment request seeks to transfer the site certificate to Helix Wind Power Facility, LLC, increase the peak generating capacity to 201 MW, and expand the previously-approved site boundary.

1.3.1 Transfer Site Certificate to Helix Wind Power Facility, LLC

In April 2010, Helix Wind Power Facility, LLC, a wholly-owned subsidiary of IBR, was formed for HWPF. Helix Wind Power Facility, LLC, is a single-member-managed entity. IBR owns 100 percent of the membership interests. Section 8 of this amendment request provides the full text of Oregon Administrative Rule (OAR) 345-027-0100, under which this transfer of ownership is requested. The articles of organization for Helix Wind Power Facility, LLC, are provided in Attachment 2.

1.3.2 Increase Peak Generating Capacity to 201 MW

This amendment request seeks to increase the maximum generating capacity and maximum number of turbines from what was originally authorized for HWPF in the July 2009 site certificate. The site certificate authorized up to 60 turbines and a generating capacity of up to 102 MW. The proposed expanded HWPF will not exceed 134 turbines and a generating capacity of 201 MW. The range of turbine types and sizes described in the site certificate will remain the same. Specifically, individual turbines will not exceed 3.0 MW, the turbine hub-height will not exceed 100 meters (328 feet), and the turbine blade tip height will not exceed 150 meters (492 feet).

1.3.3 Expand Previously-Approved Boundary

This amendment request proposes to expand the previously-approved site boundary to allow for additional turbines and generating capacity; lengthen the overhead 230-kV transmission line site boundary slightly to provide greater flexibility for connection to the interconnection substation; expand the power collection system; and add a second, optional, collector substation and operations and maintenance (O&M) building, up to two additional permanent meteorological (met) towers, an additional supervisory, control and data acquisition (SCADA) system, and additional access roads and laydown areas. Related or supporting facilities not described in this amendment request remain unchanged from those facilities authorized in the site certificate.

Consistent with the *Application for Site Certificate for the Helix Wind Power Facility* (ASC) (August 2008), this amendment request analyzes impacts for two turbine types. The turbine types represent a range that encompasses the scale and impacts of the turbines potentially used. Final turbine selection has not yet occurred. The current site certificate authorizes up to 60 turbines within the previously-approved site boundary. This request seeks to add turbines. The minimum turbine layout for the proposed expanded HWPF is 67 3.0-MW

turbines. The maximum turbine layout is 134 1.5-MW turbines. The final layout will have 67 to 134 turbines, with any combination of turbines ranging in size up to 3.0 MW.

The certificate holder seeks micrositing flexibility in the final turbine layout to allow for siting considerations. Before construction, the certificate holder will determine the number of turbines within each corridor, the spacing between turbines, and their precise locations within the corridor, based on the wind turbine models selected and other various siting criteria. The final configuration of the 134 turbines will be determined at that time. The total number will not exceed 134, and the generating capacity will not exceed 201 MW.

The total number of acres within the proposed expanded HWPF site boundary (including both the previously-approved site boundary and the proposed expanded site boundary) is approximately 20,613. Please refer to Figures 2 and 3 (Attachment 1) for maps of the proposed expanded HWPF site boundary and the components of the proposed expansion.

As described in the ASC, HWPF will connect to the regional transmission grid through either the existing 230-kilovolt (kV) transmission line owned by PacifiCorp or the existing 500-kV transmission line owned by the Bonneville Power Administration (BPA). The site certificate approved an up-to-15-mile, 230-kV transmission line to connect HWPF to either the PacifiCorp or the BPA transmission line. The 230-kV transmission line will be located entirely in Umatilla County. Energy generated by the turbines within the proposed expanded site boundary will be collected and distributed via this 230-kV transmission line to the regional transmission grid.

To facilitate transmission to the regional grid, the certificate holder requests flexibility to site up to two collector substations within the proposed expanded HWPF, one being the previously-approved collector substation located near Butler Grade Road and the other being a new collector substation located adjacent to North Juniper Canyon Road within the proposed expanded site boundary. If both collector substations are constructed, they will be connected to one another by either a new segment of the 230-kV transmission line (approximately 2.3 miles long), or a double-circuit 34.5-kV collector line (also approximately 2.3 miles long). Under either scenario, no more than 15 miles of 230-kV transmission line would be built, as described in the site certificate. A detailed description of the proposed modification is provided in Section 4.2. Figures 2 and 3 show the location of the proposed 230-kV transmission line/34.5-kV collector line, as well as the location of the previously-approved 230-kV transmission line (called the "alternative" line in the ASC).

1.4 Regulatory Framework for This Request

This request is organized in accordance with OARs 345-027-0030, -0050, -0060, and -0070, which set forth the required contents of a request to amend a site certificate, as well as additional considerations for the Council in deciding whether to grant an amended site certificate. The following sections of this request provide the information required by OAR 345-027-0030, 345-027-0050(1), OAR 345-027-0060, and OAR 345-027-0070(10).

SECTION 2

Information Required Pursuant to OAR 345-027-0030

(1) The certificate holder may request an amendment to extend the deadlines for beginning or completing construction of the facility that the Council has specified in a site certificate or an amended site certificate. The certificate holder shall submit a request that conforms to the requirements of 345-027-0060 no later than six months before the date of the applicable deadline, or, if the certificate holder demonstrates good cause for the delay in submitting the request, no later than the applicable deadline.

No change to construction deadlines is requested in this amendment. The site certificate specifies that the certificate holder will begin construction of HWPF within 3 years after the effective date of the site certificate or by July 2012, and will complete construction of the facility within 6 years after the effective date of the site certificate or by July 2015. The certificate holder does not seek to extend the deadline for beginning or completing construction.

(2) A request within the time allowed in section (1) to extend the deadlines for beginning or completing construction suspends those deadlines until the Council acts on the request.

Response: No change to construction deadlines is requested in this amendment. Therefore, this rule is not applicable.

(3) The Council shall review the request for amendment as described in OAR 345-027-0070.

Response: The information required by OAR 345-027-0070(10) is set forth in Section 7 of this amendment request.

(4) If the Council grants an amendment under this rule, the Council shall specify new deadlines for beginning or completing construction that are not more than two years from the deadlines in effect before the Council grants the amendment.

Response: No change to construction deadlines is requested in this amendment.

(5) To grant an amendment extending the deadline for beginning or completing construction of an energy facility subject to OAR 345-024-0550, OAR 345-024-0590, or OAR 345-024-0620, the Council must find that the facility complies with the carbon dioxide standard in effect at the time of the Council's order on the amendment.

Response: This rule is not applicable to HWPF.

SECTION 3

Information Required Pursuant to OAR 345-027-0050(1)

(1) Except as allowed under sections (2) and (6), the certificate holder must submit a request to amend the site certificate to design, construct or operate a facility in a manner different from the description in the site certificate if the proposed change:

(a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource protected by Council standards;

Response: The proposed changes will add turbines, collector lines, access roads, landowners, and potentially a new substation and O&M building; and expand the site boundary to allow construction of additional turbines for added electrical generating capacity. Therefore, an amendment to the site certificate is required.

Locating additional turbines within the proposed expanded site boundary will require the following modifications to major facilities and related or supporting facilities, as follows:

- The previously-approved site boundary will be expanded to the southwest to include approximately 13,027 additional acres, for a total of 20,613 acres within the proposed expanded HWPF. Up to 134 turbines will be located within the proposed expanded HWPF.
- Power generated from the proposed expanded HWPF will be transferred to the collector substation approved in the current site certificate or the new collector substation proposed in this amendment request using one of the following two methods:
  - Constructing an overhead collector system consisting of two double-circuit 34.5-kV parallel lines from the area within the proposed expanded site boundary to the previously-approved collector substation near Butler Grade Road
  - Constructing a new segment of the 34.5-kV or 230-kV line to connect the approved collector substation within the previously-approved site boundary to the proposed new collector substation within the proposed expanded site boundary.

  In either case, the 230-kV overhead line will be a maximum of approximately 15 miles in length in accordance with the current site certificate.
- As stated in the Final Order (July 31, 2009), up to 18.1 miles of 34.5-kV collector lines will transport power from the turbines to the previously-approved collector substation. Based on the maximum turbine layout of the new area, approximately 32.7 miles of additional collector lines will be installed for the turbines within the proposed expanded site boundary. The maximum length installed aboveground under the worst-case scenario for the proposed expanded HWPF will be at most 30 percent of the collector system. For purposes of estimating impacts, this would add approximately 22.9 miles of

collector lines installed underground and approximately 9.8 miles of collector lines installed on overhead pole structures in the new area.

- A SCADA system will be installed in the proposed expanded site boundary to collect operating and performance data and provide remote operation of the turbines proposed with this request. For the turbines within the proposed expanded site boundary, the length of the SCADA fiber optic cables is equal to the length of the collector line system plus, if the both collector substations are constructed, the length of the 34.5-kV or 230-kV lines between the previously-approved collector substation and the new substation within the proposed expanded site boundary. The current site certificate permits construction of up to 15 miles of 230-kV transmission line. This amendment does not seek to increase the length of 230-kV transmission line or associated SCADA, so the additional length of SCADA required for construction of turbines within the proposed expanded site boundary would be associated only with installation of an additional length of 34.5-kV collector lines. Table 3-1 presents the total additional length of SCADA along with the portion that would be placed aboveground under both substation scenarios described above.

TABLE 3-1
Length of Supervisory, Control and Data Acquisition System to be Installed

Substation Option	Length of Electrical Line (approximate miles)	Length of SCADA (approximate miles)	Aboveground SCADA (approximate miles)
Option 1: Single substation constructed			
34.5-kV single-circuit line	32.7	32.7	9.8
Option 2: Two substations, connected by 34.5-kV overhead double-circuit line or 230-kV line			
34.5-kV single-circuit line	30.4	30.3	9.1
34.5-kV double-circuit line or 230-kV line	2.3	4.6	4.6
TOTAL	**32.7**	**34.9**	**13.7**

As shown in Table 3-1, in total, the additional SCADA system cable required for the additional turbines within the proposed expanded HWPF will be up to 34.9 miles, of which up to 13.7 miles may be aboveground.

- Constructing the turbines within the proposed expanded site boundary will require improving approximately 0.7 mile of existing private roads, and constructing approximately 31.2 miles of new gravel roads to provide access for construction vehicles.

- Based on the maximum turbine layout, approximately 18 additional 2-acre laydown areas will be located adjacent to each proposed turbine string within the proposed expanded site boundary.

- Up to two additional permanent meteorological (met) towers will be located in the proposed expanded site boundary.

"(b) Could impair the certificate holder's ability to comply with a site certificate condition; or"

Response: The certificate holder is able to comply with all existing site certificate conditions (except as identified in Section 4 of this amendment request and Attachment 3, Redline Site Certificate).

"(c) Could require a new condition or change to a condition in the site certificate."

Response: Modifications to several site certificate conditions will be required to allow construction in the proposed expanded site boundary. These conditions are detailed in Section 4 and Attachment 3 (Redline Site Certificate).

SECTION 4

Information Required Pursuant to OAR 345-027-0060(1)

4.1 OAR 345-027-0060(1)(a) Name and Mailing Address

(1) To request an amendment of a site certificate, the certificate holder shall submit a written request to the Department of Energy that includes the information described in section (2) and the following:

(a) The name and mailing address of the certificate holder and the name, mailing address and phone number of the individual responsible for submitting the request.

Name and Address of Certificate Holder:

Helix Wind Power Facility, LLC
1125 NW Couch Street, Suite 700
Portland, OR 97209

Name, Mailing Address, and Phone Number of Individual Responsible for Submitting the Request:

Chase Whitney
Iberdrola Renewables, Inc.
1125 NW Couch Street, Suite 700
Portland, OR 97209
(503) 796-7220

Sara McMahon Parsons
Iberdrola Renewables, Inc.
1125 NW Couch Street, Suite 700
Portland, OR 97209
(503) 796-7732

4.2 OAR 345-027-0060(1)(b) Description of Facility

(b) A description of the facility including its location and other information relevant to the proposed change.

Response: HWPF is described in Exhibits B and C of the ASC (August 2008) and Section III of the Final Order (July 2009). The certificate holder is proposing to amend HWPF in the manner described in this amendment request. Figure 1 in Attachment 1 shows the previously-approved site boundary. As originally authorized under the site certificate, HWPF will have a generating capacity of up to 102 MW and an average generating capacity of approximately 34 MW. This request seeks to increase the peak generating capacity to

201 MW. The average generating capacity for the proposed expanded HWPF will be approximately 67 MW.

The HWPF components will be located on private land for which the certificate holder has negotiated or is still negotiating long-term wind energy leases and additional easements as required.

4.3 OAR 345-027-0060(1)(c) Proposed Changes to the Permitted Facility

(c) A detailed description of the proposed change and the certificate holder's analysis of the proposed change under the criteria of OAR 345-027-0050(1).

Response:

4.3.1 Proposed Changes to Major Facilities

This amendment request seeks to change the maximum generating capacity and maximum number of turbines from what was originally authorized in the site certificate. The total MW will increase from 102 to 201 and the maximum number of turbines will increase from 60 to 134. Turbines will not exceed 3.0 MW. The turbine hub-height will not exceed 100 meters (328 feet), and the turbine blade tip height will not exceed 150 meters (492 feet).The turbine vendor, size, number, and actual generating capacity have not yet been determined.

Like the original ASC, this amendment request analyzes impacts for two turbine types. The turbine types represent a range that encompasses the scale and impacts of the turbines that could potentially be used. The minimum turbine layout for the proposed expanded HWPF is 67 3.0-MW turbines. The maximum turbine layout is 134 1.5-MW turbines. The final layout will have 67 to 134 turbines, with any combination of turbines ranging in size up to 3.0 MW and a generating capacity of up to 201 MW. The total number of acres within the proposed expanded HWPF is approximately 20,613. Please refer to Figures 2 and 3 for maps of the proposed expanded HWPF and the components within the proposed expanded site boundary. As stated in Section 1.3.3, the certificate holder seeks micrositing flexibility in the final layout of turbines to allow for siting considerations.

The current site certificate authorizes up to 60 turbines within the previously-approved site boundary. As amended, the HWPF would have up to 134 turbines. However, to preserve the maximum micrositing flexibility and evaluate the impacts associated with the "worst-case" scenario for the proposed expanded site boundary, the certificate holder analyzed impacts for 91 turbines within the proposed expanded site boundary, in addition to approved impacts from a maximum of 60 authorized turbines within the previously-approved area. This conservative approach slightly overestimates project impacts.

Potential worst-case impacts of the turbine layouts for the proposed expanded site boundary shown in Figures 2 and 3 are analyzed as follows:

- Worst-case impacts from turbines within the previously-approved site boundary are conservatively assumed not to change from what was described in the ASC. Impacts and analysis described in the ASC are not repeated or revised in this request except as noted.

- Worst-case impacts from turbines shown inside the proposed expanded site boundary in Figures 2 and 3 are calculated in this request and are conservatively assumed to be in addition to impacts already authorized in the site certificate.
- Potential visual and noise impacts are evaluated for the maximum layout of 134 turbines and the minimum layout of 67 turbines within the proposed expanded HWPF.

4.3.2 Proposed Changes to Related or Supporting Facilities

Related or supporting facilities for the previously-approved HWPF consist of one O&M building, power collection system, one collector substation, a 230-kV transmission line connecting to either the existing PacifiCorp 230-kV transmission line or the existing BPA 500-kV transmission line, the SCADA system, access roads, construction laydown areas, and meteorological towers. This amendment request seeks to add up to one additional O&M building, increase the length of the power collection system, potentially add an additional collector substation, increase the length of the SCADA system, increase the length of access roads, and add additional laydown areas. Related or supporting facilities not described here remain unchanged from those facilities authorized in the site certificate. In addition, the dimensions of the major facility structures have not changed from what is described in the site certificate and Final Order, except as described below or in the impact tables provided in Attachment 4, Addendum to Temporary and Permanent Impact Calculations.

Central Power Collection System

As described in the site certificate, a network of collection power lines will be installed along and between the turbine strings to collect power generated by the individual wind turbines. The preliminary collection system proposed in this amendment request is depicted on Figures 2 and 3.

Energy generated by the turbines within the proposed expanded site boundary will be collected via collector lines and connected to either the approved collector substation to be constructed within the previously-approved site boundary near Butler Grade Road, or to a new collector substation located within the proposed expanded site boundary adjacent to North Juniper Canyon Road. Collector lines are displayed on Figures 2 and 3.

The majority of the collector system will be buried in the soil approximately 3 feet below the ground surface. However, where site-specific considerations require, the collector system may be aboveground. Using aboveground structures allows the collector lines to "span" canyons and intermittent streams and thus to reduce environmental impacts. The overhead pole structures will generally be about 80 to 100 feet tall, depending on terrain. Support structure diagrams for the collector lines were provided in the ASC and remain unchanged.

As stated in the Final Order (July 31, 2009), up to 18.1 miles of 34.5-kV collector lines will transport power from the turbines to the Facility collector substation.

Based on the maximum turbine layout of the new area, approximately 32.7 miles of additional collector lines will be installed for the turbines within the proposed expanded site boundary. The maximum length installed aboveground under the worst-case scenario for the proposed expanded HWPF will be at most 30 percent of the collector system. For purposes of estimating impacts, this would add approximately 22.9 miles of collector lines

installed underground and approximately 9.8 miles of collector lines installed on overhead pole structures in the new area.

Examples of specific conditions that will make it environmentally or economically advantageous to run portions of the collection system aboveground are as follows:

- Steep terrain where the use of backhoes and trenching machines is infeasible or unsafe
- Stream and wetland crossings where an aboveground line avoids or minimizes environmental impacts
- Soil with low thermal conductivity preventing adequate heat dissipation from the conductor, and rocky conditions that significantly increase trenching costs
- Highway and railroad crossings

Because detailed geotechnical studies have not yet been completed for the proposed expanded HWPF, it is not possible to determine the precise locations where aboveground collector lines may be necessary. Geotechnical studies may show that more lines are needed aboveground than originally planned in the preliminary layout. Therefore, in order for the Department to evaluate the potential impact of aboveground collector lines, the certificate holder proposes that no more than 30 percent of the collector system for the proposed expanded HWPF be aboveground. For purposes of estimating impacts, the proposed expansion would add approximately 9.8 miles of aboveground collector line.

Proposed Additional Collector Substation

The collector lines for the turbines within the proposed expanded site boundary will connect to either the previously-approved collector substation to be constructed within the previously-approved site boundary near Butler Grade Road, or to a new collector substation located within the proposed expanded site boundary adjacent to North Juniper Canyon Road. The proposed location of the additional collector substation is shown on Figures 2 and 3. If engineering analysis determines that it is more efficient to construct this additional collector substation, the substation site will be surrounded by a graveled, fenced area with transformer and switching equipment and an area to park utility vehicles. The additional collector substation will be connected to the previously-approved substation by either a double-circuit 34.5-kV line or a 230-kV line.

Interconnection to the Switching Station

As described in the site certificate, electricity generated from the proposed expanded site boundary will be connected to either the existing PacifiCorp 230-kV transmission line or the existing BPA 500-kV transmission line via the previously-approved HWPF overhead 230-kV transmission line.

This amendment request proposes to slightly expand (to the west) the previously-approved site boundary near the interconnect point to provide greater flexibility for connecting to the interconnection station, as shown on Figures 2 and 3.

SCADA System

A SCADA system will be installed in the proposed expanded site boundary to collect operating and performance data from the turbines, and provide remote operation of the

wind turbines. The SCADA system consists of fiber optic cables that collect operating and performance data from each wind turbine and carry that information back to a master panel at the collector substation and then from the collector substation to the operator's terminal controls at the O&M building. Where the collector lines are installed underground, the fiber optic SCADA cables will be installed in the collector line trenches above the underground collector lines. Where the collector lines are installed on aboveground structures, the fiber optic SCADA cables will be installed on the overhead structures above the collector lines.

Based on the maximum turbine layout, up to approximately 35.1 miles of SCADA fiber optic cables will be installed along the collector system for turbines within the proposed expanded site boundary. No more than 30 percent of the collector system for the proposed expanded HWPF will be aboveground. For purposes of estimating SCADA length, of the 35.1 miles, up to 13.9 miles of fiber optic cables will be installed on overhead pole structures.

The aboveground portion of the SCADA system within the proposed expanded site boundary will be accompanied by lightning shield wires. Lightening shield wires will also be used on the length of the 230-kV transmission line between the collector substation and the interconnection station. The lightning shield or optical ground wires run above the power conductors on the 230-kV line. The lightning shield wire is shown in position TM-F1 on Figures B-12, B-13, and B-14 in the ASC. The maximum length of the lightning shield wire associated with the proposed expanded site boundary will be approximately 13.9 miles inclusive of any aboveground portion of the collector system.

Transportation and Access Roads

Transportation to and from the proposed expanded site boundary will follow a route that includes access via Interstate, State, and County roads. The current site certificate authorized use of one primary and several secondary or alternative transportation routes. This amendment request changes the primary route and maintains previously-approved alternative transportation routes to provide flexibility during the construction process. Constructing the turbines proposed with this amendment request will require improving some existing private roads, and constructing new gravel access roads to provide access for construction vehicles. The new construction roads may continue to be used during HWPF operations. Roads will be designed under the direction of a licensed engineer and compacted to meet equipment load requirements.

Based on the maximum turbine layout, this amendment request proposes the construction of approximately 31.2 miles of new roads within the proposed expanded site boundary. These new gravel roads will be constructed in areas where existing roads do not provide access to wind turbine locations, and along the length of turbine strings. Generally, these new roads will be up to 20 feet wide (with up to an additional 60 feet temporarily disturbed for crane paths[1] during construction).

In addition, a maximum of approximately 0.7 mile of existing private roads will be improved by widening, grading, and graveling. Typical existing roads are 8 to 12 feet wide,

[1]The cranes required to erect turbines will temporarily disturb a corridor up to 60 feet wide during transport between turbine locations. This 60-foot corridor will parallel the access road corridor where possible, and will allow for the irregular path made by the 30-foot-wide crane, and up to 10 feet on either side of the crane for support vehicles. Where vegetation needs to be cleared (i.e., vegetation too large for the crane to walk over), the vegetative spoils will be pushed beyond the 50-foot path for up to 5 feet on either side, for a maximum disturbance width of 60 feet. In locations where the crane paths do not parallel access roads, temporary crane paths will be 55 feet in width, as shown in Table 2, Temporary Impacts, in Attachment 4.

and will need to be widened to up to 80 feet during construction and up to 20 feet during operations. Where necessary, existing cattle guards will be replaced with wider cattle guards to accommodate the wider roads. Figures 2b and 3b show the locations of the existing private roads that will need improvement.

Additional Construction of Laydown Areas

During construction of the turbines and associated facilities proposed with this amendment request, laydown areas will be used to stage construction and store supplies and equipment. Based on the maximum turbine layout, approximately one 2-acre laydown area will be located adjacent to each proposed turbine string (a total of 18 2-acre laydown areas). The locations of these laydown areas are illustrated on Figures 2 and 3.

The additional laydown areas will consist of a crushed gravel surface that will be removed following construction. The disturbed area will be restored to preconstruction conditions as required by the site certificate and the revegetation plan included as Attachment B to the Final Order.

Meteorological Towers

The site certificate authorizes up to two permanent meteorological (met) towers. The certificate holder seeks authorization to construct up to two additional met towers as part of the amendment request.

Operations and Maintenance Buildings

This amendment request seeks to add one optional, additional O&M building beyond the O&M building authorized in the site certificate, to be located on North Juniper Canyon Road adjacent to the proposed new collector substation. The O&M building authorized in the site certificate has a footprint of up to 8,000 square feet and is located on a 3-acre site, including a fenced and graveled area for parking and storage. The additional O&M building is requested with the same footprint and site area.

4.3.3 Legal Description for Proposed Expanded Site Boundary

A legal description (township, range, section, Quarter-quarter section) of the proposed expanded site boundary is provided in Table 4-1 and Figure 5.

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
TOWNSHIP 5N		
32E	1	L 1
32E	1	L 2
32E	1	L 3
32E	1	L 4
32E	1	NESE
32E	1	NESW
32E	1	NWSE
32E	1	NWSW
32E	1	SENE
32E	1	SENW
32E	1	SESE
32E	1	SESW
32E	1	SWNE
32E	1	SWNW
32E	1	SWSE
32E	1	SWSW
32E	2	L 1
32E	2	L 2
32E	2	L 3
32E	2	L 4
32E	2	NESE
32E	2	NESW
32E	2	NWSE
32E	2	SENE
32E	2	SENW
32E	2	SESE
32E	2	SWNE
32E	2	SWNW
32E	2	SWSE
32E	3	L 1
32E	3	L 2
32E	3	SENE
32E	10	NENE
32E	10	NENW
32E	10	NESE
32E	10	NESW
32E	10	NWNE
32E	10	NWSE
32E	10	NWSW
32E	10	SENE
32E	10	SENW
32E	10	SESE
32E	10	SESW
32E	10	SWNE
32E	10	SWNW
32E	10	SWSE
32E	11	NENE
32E	11	NENW

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
32E	11	NESE
32E	11	NESW
32E	11	NWNE
32E	11	NWNW
32E	11	NWSE
32E	11	NWSW
32E	11	SENE
32E	11	SENW
32E	11	SESE
32E	11	SESW
32E	11	SWNE
32E	11	SWNW
32E	11	SWSE
32E	11	SWSW
32E	12	NENW
32E	12	NESW
32E	12	NWNW
32E	12	NWSW
32E	12	SENW
32E	12	SESW
32E	12	SWNW
32E	12	SWSW
32E	13	NENE
32E	13	NENW
32E	13	NESE
32E	13	NESW
32E	13	NWNE
32E	13	NWNW
32E	13	NWSE
32E	13	NWSW
32E	13	SENE
32E	13	SENW
32E	13	SESE
32E	13	SESW
32E	13	SWNE
32E	13	SWNW
32E	13	SWSE
32E	13	SWSW
32E	14	NENE
32E	14	NENW
32E	14	NESE
32E	14	NESW
32E	14	NWNE
32E	14	NWNW
32E	14	NWSE
32E	14	NWSW
32E	14	SENE
32E	14	SENW
32E	14	SESE

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
32E	14	SESW
32E	14	SWNE
32E	14	SWNW
32E	14	SWSE
32E	15	NENE
32E	15	NENW
32E	15	NESE
32E	15	NESW
32E	15	NWNE
32E	15	NWNW
32E	15	NWSE
32E	15	SENE
32E	15	SENW
32E	15	SWNE
32E	15	SWNW
32E	23	NENE
32E	23	NWNE
32E	24	NENE
32E	24	NENW
32E	24	NESE
32E	24	NWNE
32E	24	NWNW
32E	24	NWSE
32E	24	SENE
32E	24	SENW
32E	24	SESE
32E	24	SWNE
32E	24	SWNW
32E	24	SWSE
33E	6	L 1
33E	6	L 1
33E	6	L 1
33E	6	L 1
33E	6	L 2
33E	6	L 2
33E	6	L 2
33E	6	L 2
33E	7	L 1
33E	7	L 1
33E	7	L 1
33E	7	L 1
33E	7	L 2
33E	7	L 2
33E	7	L 2
33E	7	L 2
33E	7	NENE
33E	7	NESE
33E	7	NWNE
33E	7	NWSE

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
33E	7	SENE
33E	7	SESE
33E	7	SWNE
33E	7	SWSE
33E	8	NENW
33E	8	NESE
33E	8	NESW
33E	8	NWNW
33E	8	NWSE
33E	8	NWSW
33E	8	SENW
33E	8	SESE
33E	8	SESW
33E	8	SWNW
33E	8	SWSE
33E	8	SWSW
33E	17	NENE
33E	17	NENW
33E	17	NESE
33E	17	NESW
33E	17	NWNE
33E	17	NWNW
33E	17	NWSE
33E	17	NWSW
33E	17	SENE
33E	17	SENW
33E	17	SESW
33E	17	SWNE
33E	17	SWNW
33E	17	SWSW
33E	18	L 1
33E	18	L 1
33E	18	L 1
33E	18	L 1
33E	18	L 2
33E	18	L 2
33E	18	L 2
33E	18	L 2
33E	18	NENE
33E	18	NESE
33E	18	NWNE
33E	18	NWSE
33E	18	SENE
33E	18	SESE
33E	18	SWNE
33E	18	SWSE
33E	19	L 1
33E	19	L 1
33E	19	L 1

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
33E	19	L 1
33E	19	L 2
33E	19	L 2
33E	19	L 2
33E	19	L 2
33E	19	NENE
33E	19	NESE
33E	19	NWNE
33E	19	NWSE
33E	19	SENE
33E	19	SESE
33E	19	SWNE
33E	19	SWSE
33E	20	NENW
33E	20	NESE
33E	20	NESW
33E	20	NWNW
33E	20	NWSE
33E	20	NWSW
33E	20	SENW
33E	20	SESE
33E	20	SESW
33E	20	SWNW
33E	20	SWSE
33E	20	SWSW
33E	21	NESE
33E	21	NWSE
33E	21	SESE
33E	21	SWSE
33E	22	SWSW
33E	27	NENW
33E	27	NESE
33E	27	NESW
33E	27	NWNW
33E	27	NWSE
33E	27	NWSW
33E	27	SENW
33E	27	SESE
33E	27	SESW
33E	27	SWNW
33E	27	SWSE
33E	27	SWSW
33E	28	NENE
33E	28	NENW
33E	28	NESE
33E	28	NESW
33E	28	NWNE
33E	28	NWNW
33E	28	NWSE

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
33E	28	NWSW
33E	28	SENE
33E	28	SENW
33E	28	SESE
33E	28	SESW
33E	28	SWNE
33E	28	SWNW
33E	28	SWSE
33E	28	SWSW
33E	29	NENE
33E	29	NENW
33E	29	NWNE
33E	29	NWNW
33E	29	SENE
33E	29	SENW
33E	29	SWNE
33E	29	SWNW
33E	33	NENE
33E	33	NENW
33E	33	NESW
33E	33	NWNE
33E	33	NWNW
33E	33	NWSE
33E	33	NWSW
33E	33	SENE
33E	33	SENW
33E	33	SESW
33E	33	SWNE
33E	33	SWNW
33E	33	SWSW
33E	34	NWNW
33E	34	SWNW
TOWNSHIP 6N		
31E	21	L 11
31E	21	L 12
31E	21	L 2
31E	21	L 3
31E	21	L 5
31E	21	L 6
31E	21	L 7
32E	25	NESE
32E	25	NWSE
32E	25	SENE
32E	25	SESE
32E	25	SWSE
32E	28	NESW
32E	28	NWSW
32E	28	SESW
32E	28	SWSW

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
32E	29	NESE
32E	29	NESW
32E	29	NWSE
32E	29	NWSW
32E	29	SESE
32E	29	SESW
32E	29	SWSE
32E	29	SWSW
32E	30	NESE
32E	30	SESE
32E	32	NENE
32E	32	NENW
32E	32	NESE
32E	32	NWNE
32E	32	SENE
32E	32	SENW
32E	32	SWNE
32E	33	NENE
32E	33	NENW
32E	33	NESE
32E	33	NESW
32E	33	NWNE
32E	33	NWNW
32E	33	NWSE
32E	33	NWSW
32E	33	SENE
32E	33	SENW
32E	33	SESE
32E	33	SESW
32E	33	SWNE
32E	33	SWNW
32E	33	SWSE
32E	33	SWSW
32E	34	NENE
32E	34	NENW
32E	34	NESE
32E	34	NESW
32E	34	NWNE
32E	34	NWNW
32E	34	NWSE
32E	34	NWSW
32E	34	SENE
32E	34	SENW
32E	34	SESE

TABLE 4-1
Legal Description for Proposed Expanded Site Boundary

Range	Section	Quarter-quarter Section
32E	34	SESW
32E	34	SWNE
32E	34	SWNW
32E	34	SWSE
32E	34	SWSW
32E	35	NESE
32E	35	NESW
32E	35	NWSE
32E	35	NWSW
32E	35	SESE
32E	35	SESW
32E	35	SWSE
32E	35	SWSW
32E	36	NENE
32E	36	NENW
32E	36	NESE
32E	36	NESW
32E	36	NWNE
32E	36	NWSE
32E	36	NWSW
32E	36	SENE
32E	36	SENW
32E	36	SESE
32E	36	SESW
32E	36	SWNE
32E	36	SWNW
32E	36	SWSE
32E	36	SWSW
33E	30	L 3
33E	30	L 4
33E	30	SESW
33E	31	L 1
33E	31	L 2
33E	31	L 3
33E	32	NENW
33E	31	NESW
33E	31	NWSE
33E	32	SENW
33E	31	SESE
33E	31	SESW
33E	31	SWSE

4.3.4 Land Area of Facility and Related and Supporting Facilities

Additions to the approved impacts are described in Attachment 4, Addendum to Temporary and Permanent Impact Calculations.

4.4 OAR 345-027-0060(1)(d) Proposed Changes to Site Certificate

(d) The specific language of the site certificate, including affected conditions, that the certificate holder proposes to change, add or delete by an amendment.

Response: Attachment 3 to this amendment request is a "redline" version of the site certificate, showing the proposed changes.

4.5 Relevant Council Standards

(e) A list of the Council standards relevant to the proposed change.

Response: Council standards relevant to the proposed change include Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). The requirements of each of these standards are outlined below, along with the certificate holder's responses.

4.5.1 OAR 345-022

The following Division 22 standards are addressed:

- OAR 345-022-0010 Organizational Expertise
- OAR 345-022-0020 Structural Standard
- OAR 345-022-0022 Soil Protection
- OAR 345-022-0030 Land Use
- OAR 345-022-0040 Protected Areas
- OAR 345-022-0050 Retirement and Financial Assurance
- OAR 345-022-0060 Fish and Wildlife Habitat
- OAR 345-022-0070 Threatened and Endangered Species
- OAR 345-022-0080 Scenic Resources
- OAR 345-022-0090 Historic, Cultural and Archaeological Resources
- OAR 345-022-0100 Recreation
- OAR 345-022-0110 Public Services
- OAR 345-022-0120 Waste Minimization

OAR 345-022-0010 Organizational Expertise

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

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO

14000 certified program and proposes to design, construct and operate the facility according to that program.

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

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

Response:

A. Certificate Holder's Expertise

Currently, the certificate holder is IBR, formerly PPM Energy, Inc. This amendment request seeks to transfer the site certificate for HWPF from IBR to Helix Wind Power Facility, LLC (see Section 8 of this amendment request for additional description). Helix Wind Power Facility, LLC, is a wholly-owned subsidiary of IBR and because it is envisioned that the transfer of the site certificate will occur as a part of this request for amendment, the term "certificate holder" throughout this request refers to Helix Wind Power Facility, LLC.

As described in the Final Order, IBR is a leader in the renewable industry in the United States and is also the parent owner of the Klondike III Wind Project operating under a site certificate issued by the Council. Within its power business, IBR is focused on the development and marketing of clean fuel sources, including wind as well as solar, biomass, and natural gas-fired generation.

The certificate holder will provide the organizational, managerial, and technical expertise to construct and operate the proposed expanded HWPF. The organizational, managerial, and technical expertise of IBR is described in Section IV.2(a) of the Final Order. Through direct ownership or power purchase agreements, IBR controls more than 3,500 MW of wind generation currently in operation in the U.S. and then integrates and markets the output from these projects into the wholesale power market. In the Final Order, the Council concluded that IBR "has demonstrated that it has the organizational expertise to construct and operate" the HWPF (Section IV.3(a)).

IBR will provide its expertise to its wholly-owned subsidiary, the certificate holder. Therefore, the certificate holder has the organizational, managerial, and technical expertise to construct and operate the expanded HWPF. Other than the creation of the limited liability company for business purposes, there have been no changes that would affect the Council's previous findings under this standard.

The business address is as follows:

Helix Wind Power Facility, LLC
1125 NW Couch Street, Suite 700
Portland, OR 97209

B. Third-Party Permits

The certificate holder does not rely on any state or local government permit issued to a third party.

Conclusions

This amendment request does not affect the certificate holder's ability to comply with the site certificate. Therefore, OAR 345-022-0010 (1) through (4) is met.

OAR 345-022-0020 Structural Standard

(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.

Response: The certificate holder conducted a site-specific study of the proposed expanded site boundary, as further described in Attachment 5. Based on the literature review and site reconnaissance, there was no evidence of recent (historical) slope instability, faulting, or ground rupture within the proposed expanded site boundary. The study characterized the seismic, geologic, and soil hazards of the area and determined that the potential for ground rupture, earthquake-induced landslides and slope instability, lateral spreading, liquefaction, and settlement or subsidence within the proposed expanded site boundary is low, and the

certificate holder can design, engineer, and construct the proposed expanded HWPF to avoid dangers to human safety presented by such hazards.

The proposed expanded site boundary is characterized by loessal soils overlying a very thick stratum of Columbia River basalts. The loess tends to mantle the tops and gentle side slopes of the plateaus but is thinner on steeper slopes within canyon drainages in the northern areas of the site, such as along Vansycle Canyon. The thickness of the loess can range from less than 12 inches up to tens of feet thick. The thickness of the Columbia River Basalt group in the vicinity of the proposed expanded site boundary is anticipated to be hundreds of feet thick, although individual flows may be less than a foot thick and interbedded with soils. This assessment of subsurface conditions is based on a literature review of existing geologic mapping, Natural Resource Conservation Service soil mapping, and observations made during a site reconnaissance of the area in June 2010. Attachment 5 provides further description of the subsurface conditions.

This amendment request does not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate, and therefore, OAR 345-022-0020(1) is met.

(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.

Response: The previously-approved site boundary was thoroughly characterized for seismic, geologic, and soil hazards in the ASC. Relevant site certificate conditions address seismic and nonseismic hazards, soil hazards such as collapse potential of loess, and volcanic eruptions. Attachment 5 provides the results of a survey of subsurface conditions and geology within the proposed expanded site boundary. This amendment request does not change the certificate holder's ability to comply with the SC, and therefore, OAR 345-022-0020(1) is met.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 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.

Response: This rule is not applicable.

OAR 345-022-0022 Soil Protection

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

Response: Soils and soil types within the previously-approved site boundary were described in Exhibit I of the ASC. A soil survey was conducted for the proposed expanded site boundary (see Attachment 5) and identified one additional soil type not identified in the previously-approved site boundary—the Hermiston series. A description of the Hermiston series is included in Attachment 5. The principal land use is farming and rangeland, similar

to what was described in the ASC. Native vegetation is mainly bunchgrass, sagebrush, and yarrow.

Attachment 4 summarizes the number of acres that will be temporarily disturbed by construction within the proposed expanded site boundary, and the number of acres occupied by permanent facilities during operations.

A. Impacts During Construction

Overall impacts on soils during construction of the proposed expanded HWPF will be the same as those described in the Final Order, Section IV.3(b).

B. Impacts During Operation

As described in the Final Order, operation of the HWPF within the previously-approved site boundary will have little impact on soils. There will be no additional impact to soils from construction within the proposed expanded site boundary beyond the description provided in the Final Order.

C. Mitigation Measures

This amendment request does not change the mitigation measures presented in the Final Order or the certificate holder's ability to comply with the site certificate, and therefore, OAR 345-022-0022 is met.

OAR 345-022-0030 Land Use

(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:

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

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

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

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

Response: Under OAR 345-027-0070(10), the Council must consider whether the facility complies with the land use standard for areas that will be affected by construction and operation of the proposed expanded site boundary. As demonstrated below, the proposed expanded HWPF complies with the applicable substantive criteria of Umatilla County.

Pursuant to ORS 469.504(1)(b), the Council found in Section IV.3(a) of the Final Order for HWPF (July 2009) that the HWPF complies with OAR 345-022-0030(2)(b), with authorization of an exception to Statewide Planning Goal 3 and the imposition of SC conditions 37 through 47. The proposed land use types and applicable Umatilla County zoning district for the proposed expanded site boundary have not changed from what was already approved by the Council for HWPF. Therefore, this amendment request does not affect the certificate holder's ability to meet ORS 469.504(1)(b), OAR 345-022-0030(2)(b), the Statewide Planning Goals, the applicable substantive criteria from the UCCP and UCDC, or SC conditions 37 through 47.

As described in more detail in the response to OAR 345-022-0030(3), below, the proposed expanded site boundary includes only the types of land uses (e.g., wind turbines, collector cables, access roads) and construction and operation activities originally authorized for HWPF. In addition, the land uses, proposed expanded site boundary and half-mile analysis area proposed with this amendment request are on land in the same Umatilla County zone (Exclusive Farm Use [EFU]) authorized for HWPF. Figure 6 provides an aerial photograph to demonstrate the pattern of existing land uses within the proposed expanded site boundary for HWPF and adjacent property. Figure 7 shows the UCCP designations and land use zones.

A review of the most current *Umatilla County Comprehensive Plan* (UCCP) (revised June 7, 2010) and *Umatilla County Development Code* (UCDC) (revised March 11, 2010) shows that the applicable substantive criteria remain unchanged except for one provision, UCDC Section 152.616(HHH)(2)(J). The certificate holder demonstrates compliance with this new applicable substantive criterion in the following section. The certificate holder is not requesting that the Goal 3 exception authorized for HWPF in the Final Order be modified to include the proposed expanded site boundary because a Goal 3 exception is no longer required for a wind energy facility with the incorporation of OAR 660-033-0130(37) into UCDC.

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

Response: Except for one provision, the applicable substantive criteria in the UCCP and UCDC have not changed from the criteria that were (); (1) identified as applicable to HWPF by the special advisory group (SAG)[2]; and (2) addressed in Section IV.3(a) of the Final Order for HWPF. The one revised provision is UCDC 152.616(HHH)(2)(J).

Before March 11, 2010, UCDC 152.616(HHH)(2)(J) prohibited wind energy facilities in excess of 20 acres unless an applicant obtained a Goal 3 exception. This code provision conformed to OAR 660-033-0130(22), applying to all power generating facilities, including wind

[2] The Council appointed the Umatilla County Board of Commissioners as the SAG and Ms. Carol Johnson of the Umatilla County Planning Department provided a letter on September 15, 2008, which identified the applicable substantive criteria.

facilities. The County updated UCDC Section 152.616(HHH)(2)(J) to make it consistent with the LCDC amendments to OAR 660-033-0120 and OAR 660-033-0130, which became effective on January 2, 2009. Specifically, UCDC Section 152,616(HHH)(2)(J) was revised to eliminate the 20-acre restrictions and instead incorporates OAR 660-033-0130(37) in the UCDC as follows: "All Wind Power Generation Facilities must show compliance with the standards found in OAR 660-033-0130(37)." Accordingly, now that OAR 660-033-0130(37) has been incorporated into the UCDC, it is no longer a directly-applicable LCDC administrative rule.

The land uses, proposed expanded site boundary, and half-mile analysis area proposed with this amendment request are on privately owned land in the same Umatilla County zone (EFU) as the uses and site already authorized in the Final Order. This amendment request includes only the land use types and construction and operation activities originally authorized for HWPF. Therefore, the land use types proposed in this amendment request are within the same categories as described by the SAG and specified in the UCDC [see UCDC Sections 152.060(F), 152.059(C), and 152.056(D) 4] and described on pages 23 through 26, Section IV.3(a)(A) of the Final Order. These land use types include wind power generation facility [152.060(F)]; transmission line with towers less than 200 feet in height [152.059(C)]; and temporary public road and highway detours that will be abandoned and restored to original condition or use at such time as no longer needed [152.056(D)].

A summary of how the land use types proposed with this amendment request fit into the categories previously identified by the SAG is provided directly below.

The only substantive applicable criterion that was not addressed in the Final Order is the amended UCDC 152.616(HHH)(2)(J), which requires that

> *"[a]ll Wind Power Generation Facilities must show compliance with the standards found in OAR 660-033-0130(37)."*

OAR 660-033-0130(37), in turn requires the following:

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

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

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

(i) Technical and engineering feasibility;

(ii) Availability of existing rights of way; and

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

The certificate holder proposes to expand the previously-approved site boundary to the south to increase the number of turbines and peak generating capacity of HWPF. The proposed expanded site boundary takes advantage of a known wind energy resource and of the facility components already approved as a part of the HWPF. In Section IV.3(a)(B) of the Final Order, the Council found that HWPF would impact 15 acres of high-value farmland soils. The facilities within the proposed expanded site boundary would impact approximately 0 acres of high-value farmland soils, consistent with the approach discussed in the *Draft Proposed Order for the Montague Wind Energy Facility* dated June 22, 2010. Therefore, OARs 660-033-0130(37)(a)(A) through (E) do not apply; the certificate holder does not need to consider reasonable alternatives.

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

OAR 660-033-0130(37)(a)(A) through (E) do not apply; the certificate holder does not need to consider reasonable alternatives.

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

OAR 660-033-0130(37)(a)(A) through (E) do not apply; the certificate holder does not need to consider reasonable alternatives

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

OAR 660-033-0130(37)(a)(A) through (E) do not apply; the certificate holder does not need to consider reasonable alternatives

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

OAR 660-033-0130(37)(a)(A) through (E) do not apply; the certificate holder does not need to consider reasonable alternatives

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

(A) The proposed wind power facility will not create unnecessary negative impacts on agricultural operations conducted on the subject property. Negative impacts could include, but are not limited to, the unnecessary construction of roads, dividing a field or multiple fields in such a way that creates small or isolated pieces of property that are more difficult to farm, and placing wind farm components

such as meteorological towers on lands in a manner that could disrupt common and accepted farming practices; and

This requirement is substantially similar to the analysis under UCDC Section 152.061 in Section IV.3(a)(A) of the Final Order. The proposed expanded HWPF is the same land use and has the same characteristics as what was previously evaluated and approved by the Council. Therefore, based on the discussion above and in Section IV.3(a)(A) of the Final Order, the proposed expansion will not create unnecessary negative impacts on agricultural operations within the site boundary. OAR 660-033-0130(37)(b)(A) is met.

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

The certificate holder will conduct all construction work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to DEQ and as required by the National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge General Permit 1200-C (Condition 77 of the Final Order). The ESCP is provided in Attachment 6. The proposed expansion is included in the ESCP and governed under the NPDES Permit 1200-C. This request for amendment demonstrates that the proposed expansion meets the Council's Soil Protection Standard. For these reasons, the construction and operation of the proposed expansion will not result in unnecessary soil erosion and OAR 660-033-0130(37)(b)(B) is met.

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

The certificate holder is obligated to decommission and restore the facility site under the Council's Retirement and Financial Assurance Standard, which includes restoring the site to pre-construction conditions suitable for agricultural use (Conditions 8, 9, 31, and 32 of the Final Order). This amendment request addresses the certificate holder's ability to meet the Council's Retirement and Financial Assurance Standard. For the reasons discussed there, and subject to SC conditions, the construction and operation of the proposed expansion will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. OAR 660-033-0130(37)(b)(C) is met.

(D) Construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weeds species. This provision may be satisfied by the submittal and county approval of a weed control plan prepared by an adequately qualified individual that includes a long-term maintenance agreement. The approved plan shall be attached to the decision as a condition of approval.

During construction and operation of the facility, the certificate holder must implement a plan to control the introduction and spread of noxious weeds. Condition 89 in the Final Order addresses construction impacts to agricultural land and requires the certificate holder

to implement the Revegetation Plan, which includes weed control measures. For this reason and the reasons addressed under OAR 660-033-0130(37)(b)(D) in the Final Order, this criterion is met.

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

This criterion is not applicable. Regardless, as discussed above, OAR 660-033-0130(37)(b)(D) is met.

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

All criteria under OAR 660-033-0130(37)(b) are met.

In sum, for these reasons, and the reasons included in response to OAR 660-033-0130(37) in the Final Order, the proposed expansion satisfies OAR 660-033-0130(37) and thus complies with UCDC 152.616(HHH)(2)(J).

Conclusion

The applicable substantive criteria for the proposed expansion remain consistent with previous recommendations made by the SAG as described in Section IV.3(a)(A) of the Final Order. The applicable provisions from the UCCP and UCDC remain the same as when they were applied to the HWPF, with one exception. The certificate holder demonstrates compliance with the one revised provision, specifically UDCD 152.616(HHH)(2)(J) above. In addition, the land use types and construction and operation activities proposed with this amendment request remain the same as those originally authorized for HWPF. The proposed land use types and construction and operation activities will also occur exclusively on private land in the same jurisdiction and zoning district as the uses and site already authorized in the Final Order. Therefore, the Council may rely on the proposed findings in this amendment request and the findings in Section IV.3(a) of the Final Order to conclude that the certificate holder has sufficiently demonstrated that the proposed expansion satisfies OAR 345-022-0030(3).

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

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

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

(c) The following standards are met:

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

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

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

Response: The Council may determine that the proposed expansion satisfies statewide planning goals by complying with all applicable substantive criteria of the UCDC, pursuant to ORS 469.504(1)(b)(A).

OAR 345-022-0040 Protected Areas

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

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

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

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

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

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

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

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

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

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

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

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

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

(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University…

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

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

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

Response:

The certificate holder conducted an analysis of significant potential impacts on protected areas as described above in (a) through (p) for an analysis area extending 20 miles from the proposed expanded HWPF site boundary [in accordance with OAR 345-001-0010(2) and -57(e)], including areas outside the state[3]. Two Zone of Visual Influence (ZVI) maps were developed for the analysis area, one for the maximum turbine layout (see Figure 10a) and one for the minimum turbine layout (see Figure 10b). Both maps show the locations of the protected areas that have been identified within the expanded analysis area. In addition, the maps include a ZVI analysis to show the areas from which the proposed expanded HWPF wind turbines potentially will be visible.

In the Final Order for the previously-approved site boundary, seven protected areas were identified within 20 miles of HWPF, but as stated in Section IV.3(c) on page 72, "the proposed facility would not be located within any protected area designated under OAR 345-022-0040(1)." Similarly, the certificate holder's analysis indicates that no protected areas lie within the proposed expanded site boundary. Three additional protected areas do occur within the 20-mile analysis area beyond the seven identified in Section IV.3(c), Table 6, of the Final Order. These three additional areas and the seven areas identified in the Final Order are shown in Figures 10a and 10b and summarized in Table 4-2.

[3] Five of the ten protected areas and a portion of an eighth are located entirely in Washington. Although the certificate holder has undertaken studies of potential impacts to all protected areas within the analysis area, the certificate holder reserves the right to argue that applicable Oregon law does not require analysis of protected areas outside of Oregon.

TABLE 4-2
Protected Areas within 20-Mile Analysis Area

Protected Area	Rule Reference	**Approximate Distance to Portion of Proposed Expanded Site Boundary Containing Turbines** (Miles)	**Direction from Site Boundary Containing Turbines**	State
McNary National Wildlife Refuge	(d)	13	W	Washington
Wallula HMU[a]	(d)	6	NW	Washington
Stateline/Juniper Canyon HMU[a]	(d)	6	W	Washington and Oregon
Two Rivers HMU[a]	(d)	11	NW	Washington
Peninsula HMU[a]	(d)	12	NW	Washington
Whitman Mission NHS	(a)	13	NE	Washington
Cold Springs National Wildlife Refuge	(d)	15	SW	Oregon
Hat Rock State Park	(h)	16	W	Oregon
McKay Creek National Wildlife Refuge	(d)	18	S	Oregon
Hermiston Agricultural Research and Extension Center	(m)	24[b]	SW	Oregon

Note:

[a] Managed as part of the McNary National Wildlife Refuge.

[b] Located within the analysis area, 20 miles from the western end of the proposed addition to the transmission line corridor.

HMU = Habitat Management Unit.
NHS = National Historic Site.

The design, construction, and operation of the proposed expanded HWPF will not result in noise, traffic, water, or wastewater impacts on any of the protected areas listed in Table 4-2 for the reasons described on pages 73 and 74 of the Final Order and supplemented by information in this amendment request (see responses to OAR 340-035-0035, Noise; OAR 345-022-0110, Public Services; and OAR 345-022-0120, Waste Minimization). This finding is consistent with OAR 345-021-0010(1)(L)(C)(i-iv).

A ZVI analysis was conducted to determine the extent to which the turbines within the proposed expanded site boundary will be visible from the protected areas, and where visible, to assess the nature and degree of potential impacts on the existing scenic qualities of the protected areas.

The McNary Wildlife Refuge is approximately 14 miles from the nearest turbine within the proposed expanded site boundary. Consistent with the Final Order, the new ZVI shows that turbines within the proposed expanded site boundary will likely be visible from the refuge, as well as from the refuge's Peninsula HMU, Two Rivers HMU, and the eastern edge of the Wallula HMU. The ZVI indicates that turbine visibility in each of these areas would be similar for the proposed expanded site boundary to what was anticipated for the previously-approved HWPF. Based on the ZVI, turbines will not be visible from the Stateline/Juniper Canyon HMU. The refuge is protected for wildlife habitat and is not

managed for its scenic views. The proposed expansion does not change the finding in the Final Order (page 75) that no significant adverse impacts to this protected area will occur.

As determined in the Final Order, the historic setting noted in the General Management Plan for the Whitman Mission National Historic Site "refers primarily to the area immediately adjacent to the Mission and not too distant areas that might be visible from the Mission." Turbine visibility from the Mission site would be similar for the proposed expanded site boundary to what was anticipated for the previously-approved site boundary, according to the ZVI presented in Figures 10a and 10b. Therefore, the proposed expansion will not change the finding on page 75 of the Final Order that the "impact of any visible HWPF turbines would not significantly affect the purpose of the Whitman Mission as a protected area."

Review of the ZVI analysis presented in Figures 10a and 10b indicates that the turbines within the proposed expanded site boundary will be visible from the Cold Springs National Wildlife Refuge. This protected area is managed for wildlife and wildlife habitat and not for scenic quality. Accordingly, the views of turbines will not constitute a significant adverse impact on this protected area.

Review of the ZVI analysis presented in Figures 10a and 10b indicates that the turbines within the proposed expanded site boundary will not be visible from Hat Rock State Park, approximately 15 miles away from the nearest portion of the site containing turbines. Therefore, no significant adverse visual impacts to this protected area will occur.

McKay Creek National Wildlife Refuge is located approximately 18 miles south of the proposed expanded site boundary. This protected area was within the original analysis area and was not evaluated in the Final Order, but is evaluated here because it falls within the analysis area for the proposed expanded site boundary. Like Cold Springs and McNary, this refuge is managed primarily for wildlife and wildlife habitat, not for scenic quality (USFWS, 2010). Hence, the limited views of HWPF turbines will not constitute a significant adverse impact on this protected area.

The Hermiston Agricultural Research & Extension Center (HAREC) is an extension service of the Oregon State University (OSU) Agricultural Experiment Station (AES). The AES and its branch stations, including HAREC, conduct research the agricultural, biological, social, and environmental sciences for the economic, social and environmental benefit of Oregon. The center is 24 miles away from the nearest portion of the proposed expanded site boundary containing turbines but just under 20 miles from the western end of the proposed addition to the transmission line corridor. HAREC is managed for educational and research purposes, not scenic views. The proposed expanded HWPF will not cause a significant adverse impact on the Center.

In summary, the design, construction, and operation of the proposed expanded HWPF will not occur within, nor will it result in any significant adverse impacts to the protected areas listed. Accordingly, the certificate holder demonstrates that the proposed expanded HWPF can be designed, constructed, and operated in accordance with OAR 345-022-0040(1).

(2) Notwithstanding section (1), the Council may issue a site certificate for a transmission line or a natural gas pipeline or for a facility located outside a protected area that includes a transmission line or natural gas or water pipeline as a related or supporting facility located in a protected area

identified in section (1), if other alternative routes or sites have been studied and determined by the Council to have greater impacts. Notwithstanding section (1), the Council may issue a site certificate for surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if other alternative routes or sites have been studied and determined by the Council to be unsuitable.

Response: This rule is not applicable because the amendment request for HWPF does not include any related or supporting facilities in a protected area identified in OAR 345-022-0040(1).

(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

Response: This rule is not applicable because the amendment request for HWPF does not include a transmission line or natural gas pipeline routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kV or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 pounds per square inch gauge (psig).

OAR 345-022-0050 Retirement and Financial Assurance

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

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

Response: The amendment request includes an increase in the area occupied by turbines, access roads, and other facilities resulting in an additional area of estimated site restoration. However, this amendment request does not change the information presented in the Final Order regarding the process or methods for retiring (decommissioning) the HWPF as expanded under the proposed amendment, following permanent cessation of construction or operation, nor does this request change the certificate holder's ability to comply with the site certificate. The methodology used for decommissioning and restoring the proposed expanded HWFP will not change from the methodology described in the Final Order. The HWPF can be retired (decommissioned) and the site restored adequately to a useful, nonhazardous condition that allows continued use for agriculture. Accordingly, this amendment request does not change the certificate holder's ability to meet OAR 345-022-0050 and the Council may find under OAR 345-027-0070(10) that the retirement and financial assurance standard is met.

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

Response: As described in the Final Order, the certificate holder demonstrated a reasonable likelihood of obtaining a bond or letter of credit in the amount of $6.119 million in 2nd Quarter 2009 dollars to retire a maximum of 60 turbines (up to 102 MW) to a useful, nonhazardous condition. The certificate holder is preparing to construct up to 91 turbines (within the expanded project boundary), and will submit an adjusted bond or letter of credit based on the additional turbines before construction as required by the site certificate.

This amendment request does not seek to change the range of turbine types or sizes. The amendment request seeks to change the maximum number of turbines and maximum generating capacity of the HWPF from what was originally authorized in the site certificate. Construction of the proposed expansion will result in additional area of restoration and retirement of additional roads and transmission facilities. Previously the certificate holder has demonstrated a reasonable likelihood of obtaining a bond or letter of credit to retire a facility with up to 60 turbines, and the site certificate allows for the adjustment of the bond or letter of credit prior to construction.

Attachment 7 contains a cost estimate for restoration of the proposed expanded site boundary. Based on the maximum turbine layout, the total estimated cost (including contingencies, general costs, performance bonds, administration and project management, and maximum lengths of components) for restoration of the proposed expanded site boundary is approximately $8.2 million in 3rd Quarter 2010 dollars. The unit costs presented in Attachment 7 are from the July 31, 2009, site certificate. The costs were adjusted from 2nd Quarter 2009 dollars to 3rd Quarter 2010 dollars, with the application of the gross domestic product (GDP) implicit price deflator values for the 2nd Quarter 2009 and 3rd Quarter 2010, published by the Oregon Department of Administrative Services Economic Advisory Committee. This cost estimate is conservative because it includes 17 turbines that are part of both the initial estimate presented in the site certificate and the proposed expanded site boundary. The estimate for restoring the entire HWPF, as expanded under the proposed amendment, will be less than the combined estimated cost presented in the site certificate and the estimated cost provided in Attachment 7 for the proposed expanded site boundary.

The cost estimate is based on the Department of Energy's estimates of cost removal and does not include scrap value. However, the certificate holder respectfully requests that the Council recognize the costs of said decommissioning security and reserves the right to argue that the Council consider the following when establishing the amount and timing of said security:

- The risk of the HWPF ceasing operations in the first 10 years is extremely low.
- The wind turbines will have a significant resale value in the early years of HWPF life.
- The salvage value of the turbines and towers warrants consideration.
- The landowner leases require the certificate holder to decommission the HWPF.

The certificate holder prefers that the decommissioning security requirement become effective in the later years of the HWPF's life (e.g., in year 15). At that point, the Facility will still have substantial commercial value, but decommissioning could be expected after another 15 to 20 years.

For the reasons above, and subject to the proposed condition, HWPF, as amended, meets OAR 345-022-0050 and the Council may find under OAR 345-027-0070(10) that the retirement and financial assurance standard is met.

OAR 345-022-0060 Fish and Wildlife Habitat

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

OAR 635-415-0025 Requirements (Implementation of Department Habitat Mitigation Recommendations):[4]

(1) "Habitat Category 1" is irreplaceable, essential habitat for a fish or wildlife species, population, or a unique assemblage of species and is limited on either a physiographic province or site-specific basis, depending on the individual species, population or unique assemblage.

> *(a) The mitigation goal for Category 1 habitat is no loss of either habitat quantity or quality. ****

(2) "Habitat Category 2" is essential habitat for a fish or wildlife species, population, or unique assemblage of species and is limited either on a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.

> *(a) The mitigation goal if impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality. ****

(3) "Habitat Category 3" is essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.

> *(a) The mitigation goal is no net loss of either habitat quantity or quality. ****

(4) "Habitat Category 4" is important habitat for fish and wildlife species.

> *(a) The mitigation goal is no net loss in either existing habitat quantity or quality. ****

(5) "Habitat Category 5" is habitat for fish and wildlife having high potential to become either essential or important habitat.

> *(a) The mitigation goal, if impacts are unavoidable, is to provide a net benefit in habitat quantity or quality. ****

(6) "Habitat Category 6" is habitat that has low potential to become essential or important habitat for fish and wildlife.

> *(a) The mitigation goal is to minimize impacts. ****

Response: All of the fish and wildlife habitats within the addition to the site boundary were identified and categorized according to Oregon Department of Fish and Wildlife (ODFW) policy, as described in Attachments 4 and 8. No Category 1 habitat will be impacted by the proposed expansion. Approximately 92 percent of the addition to the previously-approved site boundary is located in agricultural croplands or developed areas (i.e., residences or commercial facilities). During final design, the components will be microsited to avoid impacts to Category 1 habitat, and to avoid and minimize both temporary and permanent impacts to high-quality native habitat where practicable. The area of impact for the new components of the expanded site boundary within each affected habitat category and the corresponding mitigation area for each category are calculated as follows, based on worst-case estimates that represent maximum potential impacts:

- Category 1
  - All impacts will be avoided.

[4] The provisions cited under OAR 635-415-0025 are included only in part, rather than in their entirety, for purposes of brevity.

- Category 2
  - Footprint impacts: 0.01 acre
  - Temporary impacts to shrub-steppe (SS): 0.24 acre
  - Mitigation area requirement: [0.01 acre (footprint) x 2] + [0.24 acre (temporary impacts) acres x 0.5] = 0.03 acre
- Category 3
  - Footprint impacts: 1.24 acres
  - Temporary impacts to SS: 0.72 acre
  - Mitigation area requirement: 1.24 (footprint) acres + [0.72 (temporary impacts)x 0.5] = 1.28 acres
- Category 4
  - Footprint impacts: 0.30 acre
  - Mitigation area requirement: 0.30 acre
- Category 5
  - Footprint impacts: 0 acre
  - Mitigation area: 0 acre
- **Total mitigation area (rounded to nearest whole acre): 2 acres**

Temporary habitat impacts will be mitigated consistent with ODFW standards as described in the Revegetation Plan included as Attachment B to the Final Order. Permanent and temporary impacts to SS that cannot be avoided will be mitigated consistent with ODFW standards as described in the Habitat Mitigation Plan included as Attachment C to the Final Order. The 2 mitigation acres calculated above are in addition to the 49 acres identified in the Habitat Mitigation Plan. As described in Attachment C, the certificate holder identified a 60-acre parcel in proximity to the project where habitat protection and enhancement are feasible. The parcel is large enough to accommodate the additional acres.

This amendment request does not change the certificate holder's ability to comply with the Final Order. There is sufficient evidence upon which the Council may find that the design, construction, and operation of the proposed expansion, taking into account the proposed mitigation measures, are consistent with the fish and wildlife mitigation goals and standards of OAR 635-415-0025 and that the certificate holder has demonstrated compliance with OAR 345-022-0060.

OAR 345-022-0070 Threatened and Endangered Species

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

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

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

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

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

Response:

The report titled *Helix Wind Power Facility 2010 Biological Investigations for the Proposed Expanded Site Boundary* (NWC, 2010) is provided as Attachment 8 to this amendment request. The update to WEST, Inc.'s, report titled *Avian and Bat Cumulative Impacts Associated with Wind Energy Development in the Columbia Plateau Ecoregion of Eastern Washington and Oregon* is provided as Attachment 9.

No plant or animal species listed as threatened or endangered under ORS 564.105(2) were documented within the proposed expanded site boundary. One state-listed threatened species, the bald eagle, might travel through the area, but neither they nor their habitat will be significantly affected by the amended Facility. Avoidance and mitigation measures built into the Facility location and design, the SC, and attachments to the Final Order, will reduce the potential for impacts to insignificant levels.

This amendment request does not change the certificate holder's ability to comply with the Final Order. Based on the information provided in this amendment request, there is sufficient evidence upon which the Council may find that the amended Facility, taking into account the proposed mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of threatened or endangered plant or wildlife species within the analysis area, and that the certificate holder demonstrates compliance with OAR 345-022-0070.

OAR 345-022-0080 Scenic Resources

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

(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 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.

Response: Under OAR 345-027-0070(10), the Council must consider whether the certificate holder complies with the scenic resource standard for areas that will be affected by construction and operation of the proposed expanded HWPF. As demonstrated below, the design, construction, and operation of the proposed expanded HWPF will not result in significant adverse impacts to scenic resources and values identified as significant or

important in local land use plans, tribal land management plans, and federal management plans for any land located within the 10-mile analysis area measured from the site boundary.

A. Visual Features of the Site and the Proposed Expanded HWPF

This amendment request seeks to expand the previously-approved site boundary to a maximum of 134 turbines, and a peak generating capacity approved under the site certificate of 201 MW. Figure 1 in Attachment 1 shows the previously-approved site boundary and the proposed expanded site boundary.

The primary visual features of the proposed expanded HWPF will be the same as those described in the Final Order. Modifications to visual features described in the Final Order include additional turbines, an expanded power collection system, addition of a second, optional, O&M building and a second, optional, collector substation, an additional SCADA system, and additional access roads and laydown areas. These components are described in greater detail in Section 4.3.

The certificate holder's visual impact analysis considered all components of the proposed expanded HWPF. The range of turbine types and sizes will remain consistent with the Final Order (Section III.1(b)). Specifically, individual turbines will not exceed 3.0 MW. For the purposes of the ZVI, the turbine hub-height was assumed to be 100 meters (328 feet), and the highest point of the turbine blade tip was assumed to be 150 meters (492 feet).

B. Effect on Identified Scenic Values

The certificate holder conducted an analysis of the proposed expanded HWPF and significant potential impacts on scenic resources and values identified as significant or important in applicable land use and land management plans. The purpose of the analysis was to determine potential visual impacts from the proposed expanded HWPF.

Analysis Methodology. The visual analysis was conducted using the Zones of Visual Influence (ZVI) methodology described on pages R-1 and R-2 in the ASC and referenced on pages 76 and 77 in the Final Order (Section IV.3(d)). The visibility of facilities associated with the proposed expanded HWPF was modeled using the 10-mile analysis area measured from the overall amended site boundary. The ZVI model used 43 turbines within the previously-approved site boundary and 91 turbines within the proposed expanded site boundary for a maximum of 134 turbines as depicted in Figures 11a and 11b.

The ZVI data were overlaid on maps of the 10-mile analysis area to evaluate potentially significant impacts. Two maps (Figures 11a and 11b in Attachment 1) were developed for the maximum and minimum turbine layouts, respectively. The maximum turbine layout uses the dimensions of the 1.5-MW turbine[5] and the minimum turbine layout uses the dimensions of the 3.0-MW turbine[6]. Review of these maps made it possible to determine whether the scenic resources identified in federal and local management or land use plans

[5] For the maximum layout ZVI analysis, the towers of the 1.5-MW turbines were assumed to be 80 meters (262 feet) tall, the rotors were assumed to be 77 meters (253 feet) in diameter, and the distance from the ground to the tip of the blade was assumed to be 119 meters (389 feet).

[6] For the minimum turbine layout ZVI analysis, the towers of the 3.0-MW were assumed to be 100 meters (328 feet) tall, the rotors were assumed to be 100 meters (328 feet) in diameter, and the distance from the ground to the tip of the blade was assumed to be 150 meters (492 feet).

will potentially be visible and to determine whether further analysis is required. At the same time, areas from which the proposed expanded HWPF will not be visible were identified and removed from further evaluation.

In addition to the ZVI analysis, a site visit was conducted by CH2M HILL on June 10, 2010, to confirm and document the existing visual conditions of the analysis area. Photographs from various locations within the analysis area were taken to depict the landscape character and existing conditions. Photographs showing the typical conditions within the analysis area are included as Figures 12 through 15 in Attachment 1.

Applicable Local, Tribal, and Federal Plans. The applicable land use and land management plans for the proposed expanded HWPF include those identified in the Final Order (Section IV.3(d)) as well as select additional plans. Comprehensive Plans for the cities of Adams, Athena, and Helix, and the *Comprehensive Plan of the Confederated Tribes of the Umatilla Indian Reservation*, were added to address expansion of the proposed expanded site boundary and analysis area. The Comprehensive Plans for Benton and Walla Walla counties in Washington have also been included in this analysis because the Council considered them in the Final Order. Table 4-3 lists the applicable local land use and federal management plans that pertain to lands within 10 miles of the proposed expanded HWPF site boundary.

TABLE 4-3
Applicable Local Land Use Plans and Federal Management Plans that Pertain to Lands Within 10 Miles of the Proposed Expanded Site Boundary

Plan Category/Area/Applicable Plans	Facility Not Visible in the Plan Area	Facility Potentially Visible in the Plan Area and Further Analysis Required
Local Land Use Plans[a]		
Umatilla County, Oregon		
Umatilla County Comprehensive Land Use Plan, January 1983, as amended December 2, 1987		X
Benton County, Washington		
Benton County Comprehensive Plan, 2006 Update, as amended November 2009		X
Walla Walla County, Washington		
Walla Walla County Integrated Comprehensive Plan and Environmental Impact Statement (EIS) 2007 and 2009		X
City of Athena, Oregon		
Comprehensive Plan, 1979	X	
City of Adams, Oregon		
Comprehensive Plan, June 2003	X	
City of Helix, Oregon		
City of Helix Comprehensive Plan, 1979 updated 1993		X

TABLE 4-3
Applicable Local Land Use Plans and Federal Management Plans that Pertain to Lands Within 10 Miles of the Proposed Expanded Site Boundary

Plan Category/Area/Applicable Plans	Facility Not Visible in the Plan Area	Facility Potentially Visible in the Plan Area and Further Analysis Required
Applicable Tribal Plans		
Confederated Tribes of the Umatilla Indian Reservation		
Comprehensive Plan of the Confederated Tribes of the Umatilla Indian Reservation, 1996		**X**
Applicable Federal Land Management Plans		
Bureau of Land Management		
Baker Area Resource Management Plan, 1989		**X**
U.S. Fish and Wildlife Service		
McNary National Wildlife Refuge Comprehensive Conservation Plan - Management Direction, 2008		**X**
U.S. Army Corps of Engineers		
McNary Master Plan – Lake Wallula, 1995		**X**
Lewis and Clark National Historic Trail: Comprehensive Plan for Management and Use, January 1982		**X**

[a] Some identified scenic resources are located in Washington. Although the certificate holder has undertaken studies of potential impacts to scenic resources within the analysis identified under OAR 345-021-0010(1)(r)(B), the certificate holder reserves the right to argue that applicable Oregon law does not require analysis of scenic resources outside of Oregon.

The ZVI shows that the proposed expanded HWPF will not be visible from the cities of Athena and Adams, as indicated in Table 4-3. Thus, these two jurisdictions were not analyzed further.

Identification, Description, and Potential Impacts on Scenic Resources and Values Identified as Significant or Important. Section IV.3(d)(B) of the Final Order describes significant or important scenic resources and values specifically identified in applicable land use and land management plans. The analysis below addresses only information that has changed since issuance of the Final Order (such as changes to the boundary of a planning area or resource), new information introduced since issuance of the Final Order (such as new or updated management plans), differences in the analysis area resulting from the proposed expanded site boundary, or changes in the degree of turbine visibility at previously identified resources.

The turbines within the proposed expanded site boundary will be located on the tops of ridges in sparsely populated, open country. As evidenced in the ZVI depicted in Figures 11a and 11b, topography such as canyons and slopes will prevent views of the turbines from many areas including the Wallula Gap and the southern portion of Lake Wallula. These areas are the only locations within the 10-mile analysis area that were identified as scenic or important scenic resources in applicable land use and land management plans (see discussion below).

The proposed expanded HWPF will be lighted in accordance with FAA regulations to minimize aviation risks. Because the flashing lights are most noticeable at night within approximately 1 mile, the visual impacts of the turbine lights will be low. Accordingly, FAA lights associated with the turbines will not have significant adverse impacts on any scenic resources or values.

Table 4-3 above lists the applicable plans shown in Figures 11a and 11b that pertain to lands from which the turbines within the proposed expanded site boundary might be visible. A discussion of the scenic resources identified in these plans follows.

Identification and Description

Umatilla County, Oregon. The Umatilla County Comprehensive Plan (UCCP) has not been updated since the site certificate for HWPF was issued in July 2009. Wallula Gap remains the only significant scenic resource within the analysis area for the new area that is expressly identified in the UCCP.

Wallula Gap is approximately 4 miles from the proposed expanded site boundary. Wallula Gap is not within the visible area of either the minimum or the maximum layout within the proposed expanded HWPF. See Figures 11a and 11b.

Benton County, Washington. The Benton County Comprehensive Plan (BCCP) has been updated since the November 2007 amended version referenced in the HWPF Final Order. Relevant provisions from Chapter 3, goal 40-1 of the updated BCCP state the following:

To conserve as undeveloped and unmarked for posterity, the visually prominent naturally vegetated steep slopes and elevated ridges that define the Columbia Basin landscape and are uniquely a product of the ice Age Floods.

Goal 40-1 is supported by the following relevant policy referring to the protection of scenic resources (page 3-14):

F. The County encourages the public and/or private acquisition of the prominent ridges within unincorporated Benton County as Natural Open Space, in order to preserve views, protect native habitat, and provide for public access and recreation associated with these landscapes.

This policy does not apply, as the HWPF is located in Oregon, and will not affect views of any prominent ridges in Benton County.

In addition, the Final Order describes one other scenic resource, State Route 14 (SR 14), which is designated as a Scenic Highway. This designation comes from Title 11 of the Zoning Code. The Final Order found that this designated resource was outside of the original HWPF analysis area. This identified scenic resource remains outside of the proposed expanded HWPF analysis area. Hence, the proposed expanded HWPF will not result in a significant adverse impact to scenic resources identified in the BCCP.

Walla Walla County, Washington. The Walla Walla County Comprehensive Plan (WWCCP), last amended in 2009, does not include a mention of scenic resources beyond those described in the HWPF Final Order (Stalzer and Associates et al., 2007). The Final Order found that the HWPF will not result in a significant adverse impact to significant or important scenic resources or values identified in the WWCCP. The proposed expanded HWPF will not alter the findings in the Final Order because the scenic view identified in the

WWCCP (from Wallula Gap toward the Columbia River) does not face the proposed expanded HWPF. Additionally, the ZVI shows that turbines will not be visible from the viewing location or vista itself.

City of Helix, Oregon. The City of Helix falls within the 10-mile analysis area approximately 2 miles southeast of the portion of the proposed expanded HWPF site boundary containing turbines. The CHCP includes one applicable reference to scenic resources or values, on page 6 under Findings, Goal 5: Open Space, Scenic Areas, Historical Sites, and Natural Resources:

Hillside sites within and adjacent to the city have views of the Blue Mountains down a primary view corridor to the southeast. Views of the surrounding wheat country are also present throughout much of the community.

Because the proposed expanded HWPF is located to the northwest of the City of Helix, the Facility will not impede or impact views of the Blue Mountains located to the southeast. Additionally, views of the wheat fields within and directly adjacent to the City will not be altered. The nearest visible turbines will be at least 2 miles away. The certificate holder met with the Helix City Council on July 13, 2010, to review the proposed amendment and continues to coordinate with the City regarding the proposed expanded HWPF.

Under "Goals, Policies, and Objectives" of the CHCP, Goal 5 is stated as follows: "*To conserve open space and protect natural and scenic resources*" (page 13). The two relevant objectives that are associated with this goal are as follows:

1. *To identify open spaces, scenic and historic areas, and natural resources that should be preserved from urban development.*
2. *To maintain open space to allow visual relief and space for active and passive recreation.*

This goal and the associated objectives do not identify a specific scenic resource that could be impacted by the proposed expanded HWPF. In addition, these provisions are meant to guide and regulate development within the City's regulatory boundaries (i.e., city limits and urban growth boundary). The proposed expanded HWPF is located outside of the City's regulatory boundaries.

Confederated Tribes of the Umatilla Indian Reservation Comprehensive Plan. The westernmost edge of the Umatilla Indian Reservation falls just inside the southeastern boundary of the 10-mile analysis area. The boundary of the Reservation is 9 miles from the nearest portion of the site boundary containing turbines. The reservation is managed under the *Confederated Tribes of the Umatilla Indian Reservation Comprehensive Plan* (CTUIR, 1996). While general scenic quality of the Reservation is mentioned, no specific scenic resources are identified in the 1996 Comprehensive Plan. Thus, the proposed expanded HWPF will not impact any scenic resources identified in this plan.

Baker Area Resource Management Plan—BLM Juniper Canyon Area. Several tracts of BLM land comprising the Juniper Canyon Area are located within the analysis area west of the proposed expanded HWPF site boundary. The closest BLM tract is within 1 mile of the part of the site boundary where the transmission line will be located and 3.5 miles from the portion where the turbines will be sited. These tracts of land are managed under the *Baker Area Resource Management Plan* (RMP) (BLM, 1989).

Because there is no public road access to the property, public use is low. The area does not have any special management or use designations, nor is it classified as an area of critical environmental concern, an outstanding natural area, or a research natural area (Jones, 2010). Consistent with the HWPF Final Order, no scenic resources were identified in the Baker RMP as significant or important in these tracts of land.

McNary National Wildlife Refuge Comprehensive Conservation Plan; Management Direction—McNary National Wildlife Refuge. The *McNary and Umatilla National Wildlife Refuges Comprehensive Conservation Plan* (USFWS) was adopted in 2007. The *McNary National Wildlife Refuge Comprehensive Conservation Plan- Management Direction* (McNary CCP) (USFWS, 2008) compiles the information from the Final CCP specific to the McNary National Wildlife Refuge. The McNary CCP is the current management plan for the Refuge. It does not contain goals, policies, or other management directives specifically for visual quality, aesthetics, or scenery. In addition, the McNary CCP does not mention specific locations within the analysis area that are important scenic resources (USFWS, 2008). Thus, consistent with the findings of the HWPF Final Order, the proposed expanded HWPF will not impact any scenic resources identified in this plan.

McNary Master Plan—Lake Wallula. Much of the shoreline of Lake Wallula is federally owned. The U.S. Army Corps of Engineers (USACE) manages this land under the guidance of the *McNary Master Plan – Lake Wallula* (USACE, 1995). The Master Plan only pertains to lands managed by the USACE and the USACE has no visual resources control concerning development on private lands. The importance of visual and scenic resources is referred to in a number of places in the Master Plan, but there are no goals or polices that specifically address visual or scenic resources.

The Master Plan describes seven homogenous "visual units", two of which are located within the 10-mile analysis area: (1) Horse Heaven; and (2) Wallula Gap. The term "visual unit" refers to the fact that these seven units have identifiable and homogenous physical or visual characteristics. It does not imply that there is a management directive for the units that based upon scenery, protecting views or other visual resources. The Horse Heaven Unit reaches from Umatilla Bridge to Wallula Junction and only the northern portion of this unit is within the analysis area. No scenic resources identified in this unit occur within the analysis area. The Wallula Gap comprises the next upstream visual unit. Wallula Gap was declared a National Natural Landmark in 1980 and has been approved for inclusion in the National Registry of Natural Landmarks (USACE, 1995). Hence, the Wallula Gap is an identified scenic resource. Although Wallula Gap is within the 10-mile analysis area, according to the ZVI, the proposed expanded HWPF will not be visible from this location. Other than Wallula Gap, the Master Plan does not identify specific locations within the analysis area that are significant or important scenic resources. Thus, the proposed expanded HWPF will not impact any scenic resources identified in this plan or alter the findings in the HWPF Final Order.

Lewis and Clark National Historic Trail: Comprehensive Plan for Management and Use. The 10-mile analysis area includes a portion of the Lewis and Clark National Historic Trail (LCNHT), which received federal designation as a "historic trail" under the National Trails System Act (NTSA) in 1978. The purpose of the historic trail designation on federal lands is to protect the historic route and any associated artifacts. Specifically, the purpose is described in the NTSA as follows:

> *National historic trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. Only those selected land and water based components of an historic trail which are on federally owned lands and which meet the national historic trail criteria established in this chapter are included as Federal protection components of a national historic trail….*(http://www.nps.gov/nts/legislation.html)

Thus, the NTSA and its related protections apply only to where the LCNHT is on federal lands. In addition, the focus of the NTSA is on historic preservation, not management of scenic resources. The visual assessment described in the next sections demonstrates that the proposed expanded HWPF will have limited impacts on views from the LCNHT.

Trail Segments Identified in Comprehensive Plan. In 1982, the National Park Service prepared the *Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use* (CPMU) as called for in Section 5(f) of the NTSA which, "guides development and use of the Trail and provides a basis for coordinated and consistent implementation…" (pg. 2). The locations of the LCNHT were determined from the CPMU mapping (sheets 39 and 40). The CPMU includes mapping to more specifically identify the location of the LCNHT in the Columbia River segment and also identifies some existing recreational and historical areas that have potential for inclusion as part of the LCNHT. The analysis area encompasses a short portion of the Columbia River segment of the LCNHT as identified in the CPMU. However, the CPMU does not identify any specific scenic resources or views related to the LCNHT within the proposed expanded HWPF analysis area.

The LCNHT segments within the proposed expanded HWPF analysis area are shown in Figures 11a and 11b. The first segment is labeled a "water trail" along the Columbia River, which is how the expedition moved from east to west in 1804. The nearest portion of the site boundary containing turbines is approximately 7 miles from the water trail. The second route is labeled a "motor route." This portion of the return journey continued over land to the northeast from the shore of Lake Wallula. The nearest portion of the site boundary containing turbines is approximately 6 miles from the motor route. Although neither of these segments is specifically identified by the CPMU as a scenic resource, the ZVI analyses in Figures 11a and 11b show that the proposed expanded HWPF will not be visible from the majority of either LCNHT segment. The main exception is the area along both a short stretch of the outbound water route on the northern portion of Lake Wallula and a portion of the overland return route beginning 5 miles east of Lake Wallula. The ZVI shows that the proposed expanded HWPF may be visible to a limited extent from these general areas, but at a distance of at least 5 miles away, the turbines of the expanded HWPF would not detract from the setting of the two routes. It should be noted that views from the two routes already include existing developments in the surrounding areas, including turbines from existing wind facilities.

Existing Areas Identified in Plan. The CPMU also identifies three existing areas within the proposed expanded HWPF analysis area, which the plan indicates have the potential for inclusion as part of the LCNHT. The areas include one park and two recreation areas, one site in Oregon and two in Washington.

In Oregon, the Cold Springs Recreation Area (now called the Warehouse Beach Recreation Area) is located at the edge of the 10-mile analysis area. This recreation area and its views are focused on the Columbia River to the north and away from the proposed expanded

HWPF. In addition, the ZVI analyses show that the proposed expanded HWPF will not be visible from the Warehouse Beach Recreation Area.

In Washington, the first potential site is located at the Walla Walla Yacht Club. Located on the eastern shore of the Columbia River just south of Lake Wallula, views from this site will be directed northwest across the River. The ZVI analysis shown on Figures 11a and 11b indicates the proposed expanded HWPF will not be visible from this site.

The second potential site in Washington is Madame Dorion Memorial Park. Located just north of the confluence of the Snake and Columbia Rivers and within the 10-mile analysis area, the ZVI shows the proposed expanded HWPF will not be visible from this location.

Summary. The LCNHT analysis is summarized as follows: (1) the focus of the NTSA is on historic preservation, not management of scenic resources; (2) no specific scenic resources related to the LCNHT are identified by the CPMU in the analysis area; and (3) the ZVI analyses show that the proposed expanded HWPF will not be visible from the majority of the LCNHT. Therefore, the LCNHT and related resources are not listed in Table 4-4, which contains the identified scenic resources in the analysis area, and no further analysis is required.

TABLE 4-4
Scenic Resources Identified in Applicable Local Land Use Plans and Federal Management Plans that Pertain to Lands Within 10 Miles of the Entire Proposed Expanded Helix Wind Power Facility

Scenic Resource	Approximate Distance and Direction to Portion of Facility Boundary Containing Turbines	Is Facility Potentially Visible?	State	Applicable Plan Scenic Resource Identified In
Wallula Gap	5 miles/Northwest	No	Washington	*Umatilla County Comprehensive Land Use Plan*, January 1983, as amended December 2, 1987 *McNary Master Plan – Lake Wallula* (USACE, 1995)
Lake Wallula	7miles/Northwest	Yes	Oregon and Washington	*McNary Master Plan – Lake Wallula* (USACE, 1995)

Potential Impacts

Wallula Gap. Wallula Gap, which is a National Natural Landmark, was one of the two areas identified in the plans reviewed in Table 4-4 (above) that are considered to be scenic resources. Wallula Gap was identified in both the UCCP and the McNary Master Plan. Consistent with the HWPF Final Order, Wallula Gap is not within the visible area of the proposed expanded HWPF and views of the Facility will not occur.

Lake Wallula. The proposed expanded HWPF will be visible from part of Lake Wallula under both the maximum and minimum layouts. However, the portion of Lake Wallula from which turbines would be visible is a minimum of 7 miles from the closest portion of the proposed expanded HWPF site boundary. Because of the viewing distances involved, the turbines will not be visually dominant elements of this view and will not create a substantial change in its character and quality. In addition, the proposed expanded HWPF will not be visible from any new portions of Lake Wallula not described in the Final Order.

Thus, the proposed expanded HWPF will not have significant adverse impacts on the views of, or views from, Lake Wallula.

C. Conclusions

In accordance with the Final Order and the discussion above, the design, construction, and operation of the proposed expanded HWPF will not result in significant adverse impacts to scenic resources and values identified as significant or important in local land use plans, tribal land management plans, and federal land management plans for any lands within the applicable analysis area. Accordingly, the certificate holder demonstrates that the proposed expanded HWPF can be designed, constructed, and operated in accordance with OAR 345-022-0080.

OAR 345-022-0090 Historic, Cultural and Archaeological Resources

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

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

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

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

Response: Under OAR 345-027-0070(10), the Council must find that all applicable standards are satisfied before approving a site certificate amendment request. As discussed below, the amended HWPF will not result in significant adverse impacts to historic, cultural, or archeological resources, and thus, although not required under OAR 345-022-0090(2), the Council may find that the amended HWPF satisfies OAR 345-022-0090 and thus is allowed under OAR 345-027-0070(10).

In March 2010, CH2M HILL on behalf of the certificate holder conducted a literature search at the Oregon State Historic Preservation Office (SHPO). From May 14 through 21, 2010, CH2M HILL and Confederated Tribes of the Umatilla Indian Reservation (CTUIR) cultural staff conducted a cultural resources field survey within and near the proposed expanded site boundary, as shown in Figure 16. Detailed results of this survey are provided in Attachment 10, *Addendum to the Cultural Resources Survey Report for the Helix Wind Power Facility*. Note that specific locations of cultural sites identified during these surveys are considered confidential by Oregon SHPO and therefore Attachment 10 is provided separately for cultural resource agencies and Tribes only.

A. Field Survey Results

The 2010 archaeological survey identified and recorded five historic-era archaeological sites and three historic-era isolates. No prehistoric resources were discovered.

The five historic-era sites are described as follows:

- **HX-2**. Consists of a well (Feature 1) and its associated wind barrier fence (Feature 2).
- **HX-3**. An historic-era site with four features consisting of a wind-powered well pump (Feature 1), a grain seeder and box (Features 2 and 3 respectively), and a fence post with barged wire (Feature 4).
- **HX-4**. Consists of four features: an abandoned or capped well and vent (Features 1 and 2, respectively), a new well and cistern (Feature 3), and historic refuse (Feature 4). There are no identifying marks on the well and vent to denote the age of the well or associated wind barrier.
- **HX-5**. Consists of four features representing the remnants of an abandoned homestead. Feature 1 is a relict one-story T-shaped gabled house, which has two main rooms and two smaller rooms. Feature 2 is a round concrete cistern. Feature 3 is a windmill tower with the fan blades missing. Feature 4 is a root cellar that is located about 5 meters west of the house.
- **HX-6**. Consists of a concrete foundation and remnant wood walls.

With few exceptions, isolated finds are not eligible for inclusion in the National Register of Historic Places (NRHP) and no protection or mitigation is required or recommended. Brief descriptions of isolate finds within the proposed expanded site boundary are as follows:

- HX-IF-2: A single wooden wagon
- HX-IF-3: Appears to be a steam boiler
- HX-IF-4: A wooden wagon

Sites HX-2, HX-3, HX-4, HX-5, and HX-6 will be protected from construction and operation activities. Before beginning construction, the certificate holder will label all identified sites on construction maps and drawings as "no entry" areas. If construction activities occur within 200 feet of an identified site, the certificate holder will flag a 50-foot buffer around the site, as described in Condition 48 of the Final Order (July 31, 2009).

B. Conclusions

For the reasons stated above, the certificate holder demonstrates that the proposed expansion can be designed, constructed, and operated in accordance with OAR 345-022-0090, subject to existing Conditions 48 through 51 of the Final Order.

OAR 345-022-0100 Recreation

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

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

(b) The degree of demand;

(c) Outstanding or unusual qualities;

(d) Availability or rareness;

(e) Irreplaceability or irretrievability of the opportunity.

Response: Recreational opportunities within the analysis area for the previously-approved site boundary were addressed in Section IV.3(e) of the Final Order for HWPF. As stated in the Final Order, the analysis area for the Recreation Standard is the area within the site boundary and 5 miles from the site boundary.

A. Recreational Opportunities in the Analysis Area for the Proposed Expanded Site Boundary

Recreational opportunities within the proposed expanded site boundary have not changed from those identified in the ASC and Final Order for the previously-approved site boundary. Pheasant hunting is the only recreational opportunity within the proposed expanded site boundary. However, the area within the proposed expanded site boundary provides no rare or irreplaceable opportunities for pheasant hunting. There is limited demand for such hunting within the proposed expanded site boundary, and there are numerous opportunities for pheasant hunting on public and private land throughout Umatilla County.

The proposed expanded site boundary does not include any designated recreation land (i.e., parks and recreation areas), consistent with the ASC and Final Order.

Recreational opportunities located outside the proposed expanded site boundary, but within the 5-mile analysis area, also remain unchanged from those identified in the ASC and Final Order. The activities include camping, hiking, pheasant hunting, nature photography and wildlife observation. Many other locations exist outside the analysis area for these opportunities. Thus, these recreational opportunities within the analysis area may be considered common and replaceable.

The designated recreation land located outside the proposed expanded site boundary, but within the 5-mile analysis area, remains similar to what is identified in the ASC and Final Order. The Stateline and Juniper Canyon Habitat Management Units (HMUs), managed by USFWS, are located to the west of the proposed expanded site boundary along the Columbia River (portions of the two HMUs are within 1 to 5 miles of the site boundary). These areas do not have a high degree of demand, are not rare, and do not possess outstanding or unusual qualities. Use by the public is low due to limited public road access. As documented in the Final Order, the Council found that Stateline and Juniper Canyon HMUs are not important recreational opportunities according to the factors listed in the Recreation Standard.

Local park and recreation facilities exist in the unincorporated community of Touchet, approximately 4 miles northeast of the previously-approved site boundary. The Council found that the previously-approved HWPF is not likely to result in a significant adverse impact on important recreational opportunities in Touchet. The nearest portion of the proposed expanded site boundary is farther from Touchet than the previously-approved site boundary. Thus, the new area also will not result in a significant adverse impact on important recreational opportunities in Touchet.

Local park and recreation facilities in the City of Helix comprise the only difference between the recreational facilities located within the 5-mile analysis area for the previously-approved site boundary and the facilities located within the analysis area for the proposed expanded site boundary. The City was outside the 5-mile analysis area for the previously-approved site boundary. The City is now located inside the 5-mile analysis area and approximately 1.8 miles from the proposed expanded site boundary. However, the proposed expanded site boundary will not directly impact any local park and recreation facilities in Helix. Thus, the design, construction, and operation of the proposed expansion are not likely to result in a significant adverse impact on important recreational opportunities in Helix.

B. Potential Impact on Important Recreational Opportunities

Design, construction, and operation of the proposed expansion will have no adverse effect on the recreational opportunities listed above, taking into account mitigation measures required by the site certificate. Accordingly, the Facility can be designed, constructed, and operated in accordance with OAR 345-022-0100(1) and consistent with the Council's previous conclusion in the Final Order.

OAR 345-022-0110 Public Services

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

(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.

Response: This amendment request changes the maximum number of turbines and maximum generating capacity of HWPF. However, the amendment request does not change the potential adverse impacts on public services from what was originally authorized in the site certificate, or affect the certificate holder's ability to comply with the site certificate.

A. Sewage, Stormwater, and Solid Waste

There will be no change to impacts on sewers, sewage treatment, or solid waste during construction or operations. During construction, the certificate holder will maintain portable toilets, stormwater drainage will continue to be subject to National Pollutant Discharge Elimination System (NPDES) permit requirements, and the certificate holder will implement a waste management plan as described in the site certificate. The existing 1200-C NPDES construction stormwater permit will be amended to include a revised ESCP for the proposed expanded HWPF (Attachment 6). The revised ESCP addresses the layout in both the proposed expanded site boundary and the previously-approved layout and site boundary.

During operations, sewage from the proposed additional O&M building will be disposed of in onsite septic systems, appropriate measures will be used to avoid or reduce erosion from

stormwater runoff during operations, and the certificate holder will continue to implement the waste management plan.

B. Water

Water use during construction of the proposed expanded HWPF (consisting of the previously-approved and proposed expanded site boundaries) will be a maximum of approximately 21.3 million gallons, as presented in Table 4-5. The certificate holder's preferred source of water would be the City of Helix under an existing municipal water right, as described in the Final Order. The City provided a statement of water availability for up to 10.6 million gallons of water to construct the previously-approved Facility. Since the Final Order, the certificate holder has requested from the City a statement of water availability for an additional 10.7 million gallons of water for construction of the proposed expanded HWPF.

Water use during operations will not increase substantially. A small increase will occur because of additional permanent staff. Water will still be provided from the exempt well, and usage will be less than 5,000 gallons per day. The quantity of wastewater or stormwater will not change substantially from what was originally authorized in the site certificate. Water for operations will come from the approved onsite well at the previously-approved O&M building or from the proposed new well at the potential second O&M building within the proposed expanded site boundary. Water use during operation will not exceed 5,000 gallons per day for both O&M buildings. In addition, there are no changes to the blade-washing described in the Final Order.

TABLE 4-5
Water Use During Construction of HWPF Based on 134 GE 1.5-MW Turbines and 67 Vestas 3.0-MW Turbines

Material	Foundations	Material Per Foundation (Approximate)	Total (Approximate)	Ultimate Disposition
Water Use for Concrete Mixing				
Water for concrete mixing (30 gallons water per cubic yard of concrete)	67 to 134	8,250 to 21,000 gallons of water per foundation	1,106,000 to 1,407,000 gallons of water	Incorporated into concrete
Water Use for Dust Control and Road Compaction				
Material	**Days**	**Water Use Gallons/Day**	**Total Water Use**	**Ultimate Disposition**
Road watering during road construction	90	120,000 gallons/day	10,800,000 gallons	Absorbed or evaporated
Road watering during foundation construction	70	80,000 gallons/day	5,600,000	Absorbed or evaporated
Road watering during erection	70	50,000 gallons/day	3,500,000	Absorbed or evaporated
Total Gallons	**Approximately 230 days**		**19,900,000**	
Total Maximum Water Usage for Entire Facility			**21,307,000**	
Previously Approved Water Usage			**10,600,000**	
Total Additional Water Usage			**10,700,000**	

C. Housing, Police and Fire Protection, Health Care, and Schools

This amendment request does not affect the impacts described in the Final Order to the socioeconomic and demographic characteristics of the local populations. The amendment request extends the period of time that construction workers will be needed for HWPF and increases the estimated number of workers. While the increased period of construction might extend the duration of some types of fire risk, it will not add a significant new adverse impact to or burden on local emergency response services. It is anticipated that an additional 50 construction workers will be needed during construction. The increase in resident and transient construction workers would not add a significant new adverse impact or burden to local service providers.

For the previously-approved site boundary, an estimated 6 to 10 workers were expected to provide ongoing operations and maintenance support. The addition of up to 99 MW in generating capacity will require additional O&M personnel, for a total of up to 17 workers. As stated in the Final Order, it is likely that current residents within the analysis area would take some of the jobs and that the number of new workers moving into the area would have an insignificant impact on available housing units. This amendment request does not change the findings in the Final Order or the ability of service providers to provide services, as the proposed changes are not significant and will fall within the same service provider boundaries previously analyzed.

D. Traffic Safety

As described in the response to OAR 345-027-0060(1)(c), transportation to and from the proposed expanded site boundary will generally follow the same transporter routes that were identified for the previously-approved site boundary for HWPF. The proposed primary transportation route will provide access to the site from Interstate 84 and State Highway 730. To minimize construction vehicle traffic within the City of Helix, the certificate holder modified this route to include two county roadways, Hatch Grade Road and Dorran Road (Highway 897). Figure 4 shows the major transporter routes proposed for use during HWPF construction and operation.

This amendment request will not significantly increase the daily truck traffic volume on nearby roads during construction or operation compared to daily truck traffic volumes without the amendment. The total truck trips will increase from an average of 30 trucks per day to an average of 35 trucks per day, but the daily truck volumes will not significantly increase from what was described in the Final Order. The amendment request extends the period of time in which construction workers will utilize state and county roadways. While the increased period of construction might extend the duration of some types of traffic safety risks, it will not add a significant new adverse impact to traffic safety. Impacts to the Umatilla County Roads Department and ODOT are described as follows:

- State, county, or local roadways may be temporarily affected by traffic increases resulting from construction vehicles accessing the site. However, any traffic delays will be short-term and temporary. Local roadways currently have very low use.
- Potential construction and operational impacts to traffic safety or maintenance on state highways are anticipated to be inconsequential as the state highway system (Interstate 84 and Oregon Highway 730) is constructed to sufficient design, safety, and load-

bearing standards. These roadways are able to accommodate vehicles at the legal load limit, thereby reducing the potential for significant traffic safety and maintenance impacts.

It is anticipated that county and local roadways will safely accommodate proposed expanded HWPF construction traffic. In some cases, however, county and local roadways may require improvement before construction can begin. To ensure the integrity of local roads, the certificate holder will coordinate with local transportation officials to make improvements where necessary to accommodate construction traffic in accordance with Condition 41 of the site certificate. Where modifications of County roads are necessary, the certificate holder shall construct the modifications entirely within the County road rights-of-way and in conformance with County road design standards subject to the approval of the Umatilla Public Works Department. Where modifications of State roads or highways are necessary, the certificate holder shall construct the modifications entirely within the public road rights-of-way and in conformance with Oregon Department of Transportation (ODOT) standards subject to the approval of ODOT. The certificate holder will evaluate the condition of County roads before construction and again after completing construction, and repair the road to preconstruction conditions or better as required by Condition 72 of the site certificate. The certificate holder will also ensure that no equipment or machinery is parked or stored on any county road except while in use.

E. Conclusion

This amendment request does not change the certificate holder's ability to comply with the site certificate and fulfills the requirements of OAR 345-022-0110.

OAR 345-022-0120 Waste Minimization

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

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

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

(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.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 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.

Response: The quantity of waste generated during construction and operation of the proposed expanded HWPF will be greater than the quantity presented in the Final Order because more turbines will be constructed and managed. However, the types of waste generated from HWPF and the methodology for handling, storing, disposing of,

transporting, and minimizing waste during construction and operation, do not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate. Therefore, OAR 345-022-0120 is met.

4.5.2 OAR 345-024

The following Division 24 standards are addressed:

- OAR 345-024-0010 Public Health and Safety Standards for Wind Energy Facilities
- OAR 345-024-0015 Siting Standards for Wind Energy Facilities
- OAR 345-024-0090 Transmission Lines

OAR 345-024-0010, Public Health and Safety Standards for Wind Energy Facilities

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

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

Response: Exclusion of the public from proximity to turbines and electrical equipment was addressed in Section IV.3(f) of the Final Order for HWPF. This amendment request does not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate.

Accordingly, the certificate holder demonstrates that the proposed expansion can be designed, constructed, and operated in accordance with OAR 345-024-0010(1).

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

Response: This amendment request does not affect the information presented in the Final Order or the certificate holder's ability to comply with the site certificate and with OAR 345-024-0010(2), which ensures the health and safety of the public.

OAR 345-024-0015 Siting Standards for Wind Energy Facilities

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

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

Response: The certificate holder considered and analyzed potential adverse environmental impacts in locating the proposed new access roads. Constructing the turbines in the proposed expanded site boundary will require improving some existing roads and constructing new gravel roads to provide access for construction vehicles. The construction of new gravel roads will be limited to locations within the site boundary. New gravel roads will be constructed in areas where existing roads do not provide access to wind turbine locations. A detailed description of the improved and new roads is provided in the response to OAR 345-022-0110 (Public Services). Road construction and improvement will not significantly affect wetlands, other waters of the state, or fish and wildlife habitat. The

changes proposed in this request for amendment do not affect the certificate holder's ability to comply with the site certificate. For these reasons, OAR 345-024-0015(1) is met.

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

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

Response:

(2) The 34.5-kV collector lines that collect the power generated by individual turbines within the proposed expanded site boundary will be predominantly underground. Some portions of the central collection system may be placed aboveground where necessary due to terrain or other considerations, as described in Section 4.3.2.

Condition 85 of the Final Order limits the total length of aboveground segments of the collector system to no more than 30 percent of the total length of the collector system. The collector system for the proposed expanded HWPF will comply with this condition. Approximately 32.7 miles of collector lines will be installed for the turbines within the proposed expanded site boundary. For purposes of estimating impacts within the proposed expanded site boundary, the maximum length installed aboveground under the worst-case scenario is 30 percent of the collector system for the proposed expanded HWPF.

(3) The collector lines for the turbines within the proposed expanded site boundary will connect to either the previously-approved collector substation to be constructed within the original site boundary near Butler Grade Road, or to a second or alternate collector substation located within the proposed expanded site boundary adjacent to North Juniper Canyon Road. The proposed location of the additional collector substation is shown on Figures 2 and 3. Engineering analysis will determine whether it is more efficient to construct one collector substation or two, minimizing the number of substations required to safely and effectively collect the power generated by the proposed expanded HWPF.

As described in the site certificate and in Section 4.3.2 of the amendment request, electricity generated from HWPF will be connected to either the existing 230-kV transmission line owned by PacifiCorp or to the existing 500-kV transmission line owned by BPA via the previously-approved, overhead 230-kV transmission line. No additional transmission lines or interconnect substations are proposed in this request for amendment.

For the reasons stated above, and with the existing site certificate condition, the requirements in OAR 345-024-0015(2) and (3) are satisfied.

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

Response: The proposed expansion will be designed to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment. The creation of artificial habitat for raptors or raptor prey will be avoided. Pad-mounted transformers at each turbine will be designed to avoid use by raptors or prey species as artificial habitat. Turbine pad areas will be graveled to reduce the potential for erosion and weed infestation. The turbines will be mounted on smooth tubular towers rather than lattice towers to avoid creating horizontal perching opportunities. Transmission support poles will conform to raptor protection guidelines recommended by the Avian Power Line Interaction Committee

(APLIC, 2006, *Suggested Practices for Avian Protection on Powerlines: The State of the Art in 2006*). Meteorological towers will be freestanding structures with no guy wires. The Final Order describes measures required to reduce risk of injury to raptors or other vulnerable wildlife. This amendment request does not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate. Therefore, OAR 345-024-0015(4) is met.

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

Response: The wind turbines will be mounted on tubular steel towers of uniform height. The towers will be uniformly painted neutral white with a low-reflectivity finish, consistent with Condition 97 of the site certificate. This amendment request does not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate. Therefore, OAR 345024-0015(5) is satisfied.

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

Response: As stated in the Final Order (Section IV(3)(g)), turbines will have the minimum nighttime lighting required by the FAA. The certificate holder will use the minimum lighting necessary for construction, repairs, or emergencies. The O&M building and the substation will have security lighting that will be shielded or downward-directed to reduce glare. This amendment request does not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate. Therefore, OAR 345-024-0015(6) is met.

OAR 345-024-0090 Transmission Lines

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

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

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

Response:

Central Power Collection System—Underground and Aboveground 34.5-kV Collector Lines. As described in Section 4.3.2 in the response to OAR 345-027-0060, a network of collection power lines will be installed along and between the turbine strings to collect power generated by the individual wind turbines. The energy generated by the turbines within the proposed expanded site boundary will be collected via overhead and underground 34.5-kV single-circuit and double-circuit collector lines. This amendment request does not change the information presented in the Final Order on the rated voltage, load-carrying capacity, type of current, and structure dimensions of the 34.5-kV collector lines, or the certificate holder's ability to comply with safety measures in the site certificate that limit electric fields

to 9 kV per meter at 1 meter above the ground surface in areas accessible to the public and require induced voltages as low as reasonably achievable.

The majority of the collector system will be buried underground. However, some portions of the collector system will be aboveground.

The electric and magnetic field modeling for the 34.5-kV central collector system lines was conducted for two configurations: one 34.5-kV single-circuit monopole line and one 34.5-kV double-circuit monopole line, as described in Exhibit AA of the ASC. The central collector system for the turbines within the new area will consist of the same two configurations. Therefore, no additional modeling was conducted for the central collector system.

Interconnection to the Switching Station—Aboveground 34.5 kV or 230-kV Transmission Line. Power generated from the proposed expanded HWPF will be transferred to the collector substation approved in the current site certificate or the new collector substation proposed in this amendment request using one of the following two methods:

- Constructing an overhead collector system consisting of two double-circuit 34.5-kV parallel lines from the area within the proposed expanded site boundary to the previously-approved collector substation near Butler Grade Road
- Constructing a new segment of the 34.5-kV or 230-kV line to connect the previously-approved collector substation within the previously-approved site boundary to the proposed new collector substation within the proposed expanded site boundary.

In either case, the 230-kV overhead line will be a maximum of approximately 15 miles in length as authorized in the current site certificate.

Modeling was conducted to calculate the estimated electric and magnetic fields for the overhead collector system consisting of two parallel double-circuit 34.5-kV structures, as summarized above, because this configuration was not evaluated as part of ASC Exhibit AA or described in the Final Order. The results of this modeling are presented in Attachment 11, *Addendum to Helix Wind Power Facility Exhibit AA Electromagnetic Fields Analysis*. The appendix to Attachment 11 contains modeling results for the overhead collector system consisting of two double-circuit 34.5-kV parallel lines.

The 230-kV line option in the second method summarized in the above list requires no modeling because the 230-kV overhead transmission line evaluated as part of the original ASC Exhibit AA was modeled with 316 megavolt amperes (MVA), or approximately 795 amperes per phase conductor, which provides worst-case magnetic fields. The electric fields for the new segment are the same as the 230-kV overhead transmission line evaluated for Exhibit AA because electric fields are a function of voltage, not power flow.

To estimate the maximum electric and magnetic fields, calculations are performed at midspan where the conductor has sagged to its lowest point between structures (the estimated maximum sag point). The proposed 34.5-kV lines were modeled with a minimum clearance of 7.6 meters (25 feet) from the ground at midspan. The electric and magnetic fields were computed for a height of 1 meter (3.3 feet) above the ground on the proposed options.

The electric fields on the corridor containing the proposed two double-circuit 34.5-kV overhead collector lines do not exceed 9 kV per meter at any location (see Figure 3 in Attachment 11). This figure demonstrates that the electric field estimated at the center of the right-of-way is less than 0.22 kV per meter. Based on these results, the proposed 34.5-kV overhead collector lines will comply with the 9-kV-per-meter standard set forth in OAR 345-024-0090(1).

The certificate holder has designed the proposed double-circuit 34.5-kV lines of the 34.5-kV overhead collector system so that induced voltage and current resulting from the lines and related or supporting facilities will be as low as reasonably achievable. An analysis of the risk of induced currents from the proposed collector lines is provided in Attachment 11.

Accordingly, the certificate holder demonstrates that the components in the proposed expanded site boundary can be designed, constructed, and operated in accordance with OAR 345-024-0090.

4.6 OAR 345-027-0060(1)(f) Other Applicable Requirements

(f) An analysis of whether the facility, with the proposed change, would comply with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances if the Council amends the site certificate as requested. For the purpose of this rule, a law, rule or ordinance is "applicable" if the Council would apply or consider the law, rule or ordinance under OAR 345-027-0070(10).

Response: Rules and laws applicable under this section include the Department of Environmental Quality's (DEQ) noise control regulations; regulations adopted by the Department of State Lands (DSL) for removing, filling, or altering material within "waters of the state"; Oregon State laws pertaining to groundwater appropriation; and Oregon Revised Statute (ORS) 469.310 pertaining to the protection of public health and safety. These regulations and the certificate holder's responses are explained further below. Regulations are summarized for brevity.

To summarize the results of the following analysis, under this amendment request the certificate holder would comply with applicable DEQ noise control regulations, DSL fill-removal regulations, Oregon laws pertaining to groundwater appropriation, and ORS 469.310. This amendment request does not change the certificate holder's ability to comply with the site certificate.

1. DEQ Noise Control Regulations—OAR 340-035-0035

DEQ noise regulations for industrial and commercial noise sources are established under OAR 340-035-0035. More specifically, OAR 340-035-0035(1)(b)(B)(iii) establishes the noise standards for noise levels generated by a wind energy facility. In Section V.1(a) of the Final Order, the Council found that HWPF would meet applicable DEQ noise standards, subject to conditions of approval (Conditions 100 through 102).

CH2M HILL prepared the A*ddendum to Helix Wind Power Facility Noise Analysis*, included as Attachment 12 to this amendment request, which demonstrates compliance with the DEQ noise regulations for the proposed expanded HWPF. Accordingly, the certificate holder

demonstrates that the Facility can be designed, constructed, and operated in accordance with OAR 340-035-0035.

2. Department of State Lands (DSL) Removal/Fill Regulations—ORS 196.795 to .990, OAR 141-085-0500 to -0785, and Section 404 of the Clean Water Act

The Oregon Removal-Fill Law (ORS 196.795 to .990) and regulations (OAR 141-085-0500 to -0785) adopted by DSL require a Removal/Fill Permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state" at the proposed site. The Council must determine whether a permit is needed. In addition to the DSL regulations, the USACE administers Section 404 of the Clean Water Act, which regulates the discharge of fill into waters of the United States (including wetlands). Under Section 404, a federal Nationwide or Individual fill permit may be required if waters of the United States are affected by project construction or operation.

As described in the Final Order, the certificate holder submitted a Joint Permit Application to DSL and the USACE for anticipated impacts to three drainage crossings within the previously-approved site boundary. The certificate holder received confirmation from the USACE on April 1, 2010, that the crossings are authorized under Nationwide Permit (NWP) No. 12.

The certificate holder also received a concurrence letter from DSL on April 20, 2009, indicating that five waterways (Vansycle Canyon, Juniper Canyon Road Unnamed Drainage [also called JC Drainage or S06], Wetland C Unnamed Drainage, VC2, and Butler Grade Unnamed Drainage) are subject to the permit requirements of the state Removal-Fill Law. The certificate holder received a subsequent letter from DSL dated May 27, 2010, stating that JC Drainage was the only State jurisdictional water that would be affected by construction of the HWPF as proposed, and a Removal/Fill Permit would not be needed for the proposed construction affecting JC Drainage due to removal-fill volumes below 50 cubic yards.

CH2M HILL completed a wetland delineation report for the proposed expansion (see Appendix D to Attachment 13, *Addendum to Helix Wind Power Facility Wetlands and Waters Delineation Report*), which will be submitted to DSL for review and approval on or around August 20, 2010. CH2M HILL has also prepared a letter to the USACE requesting concurrence that the project is authorized under NWP 12 and 14. The letter will be included with the Joint Permit Application to be submitted to the USACE in August 2010. The April 1, 2010, USACE approval letter and the two DSL approval letters are provided in Appendix D to the Attachment 13 report.

Following is a summary of findings from the *Addendum to Helix Wind Power Facility Wetlands and Waters Delineation Report*:

- No wetlands were identified within the proposed expanded site boundary. Consequently, no impacts will occur to wetlands.
- Nine stream channels were delineated within the proposed expanded site boundary. Seven of the drainages are ephemeral (SO1 through S05, JC12, and VC10). The other two channels are Vansycle Canyon, a perennial stream, and Juniper Canyon Road Unnamed Drainage (JC drainage), an intermittent stream. All seven of the ephemeral stream channels are potentially not jurisdictional under the state Removal-Fill Law because

ephemeral streams are not included in the definition of waters of the state. Vansycle Canyon and JC drainage were included within the original Joint Permit Application to DSL and the USACE and as stated earlier, DSL indicated that Vansycle Canyon and JC Drainage are State jurisdictional. However, Vansycle Canyon and JC Drainage would not be affected by construction of the proposed expansion. Therefore, no Removal-Fill permit would be needed. While the seven ephemeral stream channels could be subject to regulation by the USACE, ephemeral streams are not waters of the state by definition, and thus are not subject to the permit requirements of the Removal-Fill Law. Even if the streams were considered intermittent, they would still not be jurisdictional because they do not provide spawning, rearing, or food-producing areas for food and game fish. No fish populations use the ephemeral streams. The streams do not flow into any downstream waters and are not tributaries to downstream waters that do support fish.

The Final Order included Condition 80, which requires preconstruction surveys for any areas not previously investigated for potentially jurisdictional waters and measures to ensure that construction of the HWPF would have no impact on any jurisdictional water identified in the preconstruction surveys. For any areas to be disturbed that lie outside the areas surveyed in 2008 and 2010, the certificate holder would comply with this condition.

This amendment request does not add to the DSL jurisdictional drainage crossings presented in the Final Order, add the need for a removal/fill permit, or affect the certificate holder's ability to comply with the site certificate. Therefore, OARs 141-085-0500 through -0785 are met.

3. Groundwater Act of 1955—ORS 537.505 to .796, and OAR Chapter 690

Through the provisions of the Groundwater Act (GWA) of 1955, ORS 537.505 to .796, and OAR Chapter 690, the Oregon Water Resources Commission administers the rights of appropriation and use of the groundwater resources of the state. Under OAR 345-022-0000(1), the Council must determine whether the facility complies with these statutes and administrative rules.

Section V.1(c) of the Final Order finds that the certificate holder's proposed use of groundwater would be consistent with (1) the GWA and Oregon Water Resources Department (OWRD) statutes, (2) administration regarding rights of appropriation, and (3) the uses of state groundwater resources. As described in the response to OAR 345-022-0110 (Public Services), the amendment request does increase the quantity of water used during construction. During construction, water would be obtained from the City of Helix under an existing municipal water right or from a new well permitted under a limited water use license issued to the construction contractor.

The request does not significantly change the quantity of water used and wastewater generated during operations from what was originally authorized in the site certificate. Water for operations will come from the approved onsite well at the previously-approved O&M building or from a new onsite well at the proposed new O&M building. Water use during operation will not exceed 5,000 gallons per day, as described in the Final Order.

This amendment request does not affect the certificate holder's ability to comply with the site certificate, and therefore, the conditions of OAR Chapter 690 are met.

4. State Highway Access and Crossings —OAR Chapter 734, Divisions 51 and 55

Under OAR Chapter 734, Division 51, ODOT regulates highway approaches and access control. In particular, pursuant to OAR 734-051-0070, an Approach Permit is required for a new approach (permanent or temporary) to a state highway. As described in the Final Order, no Approach Permits will be required. No state highway road approach permits will be needed from ODOT for the expanded site boundary.

5. Public Health and Safety—ORS 469.310

Under ORS 469.310, the Council must ensure that the "siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety …." The state siting statute also provides that "the site certificate shall contain conditions for the protection of the public health and safety …." In Section V.1(d) of the Final Order, the Council imposed conditions of approval to address public health and safety issues with respect to fire protection (Conditions 57 through 63), electric and magnetic fields (Condition 86), and coordination with the Public Utilities Commission (PUC) on design and specifications for transmission lines (Condition 87). Electric and magnetic fields and transmission line requirements are addressed in the response to OAR 345-024-0090 and in Attachment 11 of this request for amendment. Specific public health and safety requirements for wind facilities are addressed in the response to OAR 345-024-0010.

This amendment request does not change the information presented in the Final Order or the certificate holder's ability to comply with the site certificate.

4.7 OAR 345-027-0060(1)(g) Landowners Within or Adjacent to the Facility

(g) If the amendment would change the site boundary, extend the deadlines for beginning or completing construction or change the legal description of the facility, an updated list of the owners of property located within or adjacent to the site of the facility, as described in OAR 345-021-0010(1)(f).

> *OAR 345-021-0010(1)(f)* ***Exhibit F****. A list of the names and mailing addresses of all owners of record, as shown on the most recent property tax assessment roll, of property located within or adjacent to the site boundary as defined in OAR 345-001-0010. The applicant shall submit an updated list of property owners as requested by the Department before the Department issues notice of any public hearing on the application for a site certificate as described in OAR 345-015-0220. In addition to incorporating the list in the application for a site certificate, the applicant shall submit the list to the Department in electronic format acceptable to the Department for the production of mailing labels. Property adjacent to the site boundary means property that is:*
>
> *(A) Within 100 feet of the site boundary where the site, corridor or micrositing corridor is within an urban growth boundary;*
>
> *(B) Within 250 feet of the site boundary where the site, corridor or micrositing corridor is outside an urban growth boundary and not within a farm or forest zone; and*
>
> *(C) Within 500 feet of the site boundary where the site, corridor or micrositing corridor is within a farm or forest zone;*

Response: An updated list of the owners of property, consistent with OAR 345-021-0010(1)(f)(C), is contained in Attachment 14 to this amendment request. A second, identical list formatted for label printing is provided electronically.

SECTION 5

Information Described in Applicable Exhibits and Incorporation of Previous Information by Reference, Pursuant to OAR 345-027-0060(2)

OAR 345-027-0060(2) In a request to amend a site certificate, the certificate holder shall provide the information described in applicable subsections of OAR 345-021-0010(1). The certificate holder may incorporate by reference relevant information that the certificate holder has previously submitted to the Department or that is otherwise included in the Department's administrative record on the facility.

Response: All exhibits of the ASC are hereby incorporated by reference.

SECTION 6

Information Described in Applicable Exhibits and Incorporation of Previous Information by Reference, Pursuant to OAR 345-027-0060(3), and (4)

OAR 345-027-0060(3) Before submitting a request to amend a site certificate, the certificate holder may prepare a draft request and may confer with the Department about the content of the request. Although the Council does not require the certificate holder to prepare a draft request and confer with the Department, the Council recommends that the certificate holder follow this procedure.

Response: The certificate holder met with the Department on May 3, 2010, to confer about the nature of the proposed changes to the previously-approved HWPF, and to discuss the content of this amendment request. During this conversation, it was determined that a draft request would not be needed (White, 2010, personal communication). Recommendations made by the Department during the May 3 meeting and subsequent teleconferences have been incorporated into this amendment request.

OAR 345-027-0060(4) The certificate holder shall submit an original and ten copies of the amendment request to the Department. In addition to the printed copies, the certificate holder shall submit the text (including appendices and graphical information to the extent practical) of the amendment request in a non-copy-protected electronic format acceptable to the Department. The certificate holder shall provide additional copies of the amendment request to the Department upon request and copies or access to copies to any person requesting copies. If requested by the Department, the certificate holder shall send copies of the request to persons on a mailing list provided by the Department.

Response: The certificate holder will comply with this requirement.

SECTION 7

Information Required Pursuant to OAR 345-027-0070(10)

OAR 345-027-0070(10) In making a decision to grant or deny issuance of an amended site certificate, the Council shall apply the applicable substantive criteria, as described in OAR 345-022-0030, in effect on the date the certificate holder submitted the request for amendment and all other state statutes, administrative rules, and local government ordinances in effect on the date the Council makes its decision. The Council shall consider the following:

(a) For an amendment that would change the site boundary or the legal description of the site, the Council shall consider, for the area added to the site by the amendment, whether the facility complies with all Council standards;

Response: The previously-approved site boundary and legal description have been modified as described in Section 4.3 of this amendment request. Council standards relevant to these changes are addressed in Section 4.5.

(b) For an amendment that extends the deadlines for beginning or completing construction, the Council shall consider:

(A) Whether the Council has previously granted an extension of the deadline;

Response: Not applicable; this amendment request does not extend the deadline.

(B) Whether there has been any change of circumstances that affects a previous Council finding that was required for issuance of a site certificate or amended site certificate; and

Response: Not applicable; this amendment request does not extend the deadline.

(C) Whether the facility complies with all Council standards, except that the Council may choose not to apply a standard if the Council finds that:

(i) The certificate holder has spent more than 50 percent of the budgeted costs on construction of the facility;

(ii) The inability of the certificate holder to complete the construction of the facility by the deadline in effect before the amendment is the result of unforeseen circumstances that are outside the control of the certificate holder;

(iii) The standard, if applied, would result in an unreasonable financial burden on the certificate holder; and

(iv) The Council does not need to apply the standard to avoid a significant threat to the public health, safety or the environment;

Response: Not applicable; this amendment request does not extend the deadline.

(c) For any amendment not described above, the Council shall consider whether the amendment would affect any finding made by the Council in an earlier order.

Response: Section 4 of this amendment request addresses the compliance of proposed changes with the applicable Council standards for issuance of a site certificate.

(d) For all amendments, the Council shall consider whether the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

Response: It is the certificate holder's position that the discussion in Section 4.5.1 of this amendment request (OAR 345-022-0050 Retirement and Financial Assurance) reflects a conservative approach to determining the amount of the bond or letter of credit to be required.

SECTION 8

Transfer of Site Certificate Pursuant to 345-027-0100

345-027-0100 Transfer of a Site Certificate:

(1) For the purpose of this rule:

(a) A transfer of ownership requires a transfer of the site certificate when the person who will have the legal right to possession and control of the site or the facility does not have authority under the site certificate to construct, operate or retire the facility;

(b) "Transferee" means the person who will become the new applicant and site certificate holder.

(2) When a certificate holder has knowledge that any transfer of ownership of the facility that requires a transfer of the site certificate is or may be pending, the certificate holder shall notify the Department of Energy. In the notice, the certificate holder shall include, if known, the name, mailing address and telephone number of the transferee and the date of the transfer of ownership. If possible, the certificate holder shall notify the Department at least 60 days before the date of the transfer of ownership.

(3) The transferee is not allowed to construct or operate the facility until an amended site certificate as described in section (10) or a temporary amended site certificate as described in section (11) becomes effective.

(4) To request a transfer of the site certificate, the transferee shall submit a written request to the Department that includes the information described in OAR 345-021-0010(1)(a), (d) and (m), a certification that the transferee agrees to abide by all terms and conditions of the site certificate currently in effect and, if known, the date of the transfer of ownership. If applicable, the transferee shall include in the request the information described in OAR 345-021-0010(1)(y)(O)(iv).

(5) The Department may require the transferee to submit a written statement from the current certificate holder, or a certified copy of an order or judgment of a court of competent jurisdiction, verifying the transferee's right, subject to the provisions of ORS Chapter 469 and the rules of this chapter, to possession of the site or the facility.

(6) Within 15 days after receiving a request to transfer a site certificate, the Department shall mail a notice of the request to the reviewing agencies as defined in OAR 345-001-0010, to all persons on the Council's general mailing list as defined in OAR 345-011-0020, to any special list established for the facility and to the most recently received list of property owners. In the notice, the Department shall describe the transfer request, specify a date by which comments are due and specify the date of the Council's informational hearing.

(7) Before acting on the transfer request, the Council shall hold an informational hearing. The informational hearing is not a contested case hearing.

(8) At the conclusion of the informational hearing or at a later meeting, the Council may issue an order approving the transfer request if the Council finds that:

(a) The transferee complies with the standards described in OAR 345-022-0010, OAR 345-022-0050 and, if applicable, OAR 345-024-0710(1); and

(b) The transferee is lawfully entitled to possession or control of the site or the facility described in the site certificate.

(9) Except as described in section (12), the Council shall not otherwise change the terms and conditions of the site certificate in an order approving the transfer request.

(10) Upon issuing the order described in section (8), the Council shall issue an amended site certificate that names the transferee as the new certificate holder. The amended site certificate is effective upon execution by the Council chair and the transferee.

(11) If the Council chair determines that special circumstances justify emergency action, the Council chair may, upon a written request from the transferee that includes a showing that the transferee can meet the requirements of section (8), issue a temporary amended site certificate that names the transferee as the new certificate holder. The temporary amended site certificate is effective upon execution by the Council chair and the transferee. The temporary amended site certificate expires when an amended site certificate as described in section (10) becomes effective or as the Council otherwise orders.

(12) The Council may act concurrently on a request to transfer a site certificate and any other amendment request subject to the procedures described in this rule for the transfer request and:

(a) The procedures described in OAR 345-027-0030 for an amendment to extend construction beginning and completion deadlines.

(b) The procedures described in OAR 345-027-0090 for an amendment to apply subsequent laws or rules.

(c) The procedures described in OAR 345-027-0060 and OAR 345-027-0070 for any amendment request not described in (a) or (b).

Response: In April 2010, IBR created the Helix Wind Power Facility, LLC, a wholly-owned subsidiary of IBR for purposes of holding the HWPF site certificate. Helix Wind Power Facility, LLC, is a single-member-managed entity. IBR owns 100 percent of the membership interests. The applicable information, organizational expertise, and financial capability for IBR provided in the ASC and discussed in the Final Order remain the same for Helix Wind Power Facility, LLC. Information concerning carbon dioxide is not relevant. As such, Helix Wind Power Facility, LLC, hereby certifies that it agrees to abide by all terms and conditions of the HWPF site certificate currently in effect and all terms and conditions that result from this amendment request.

SECTION 9

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