
**Supplement
to the Montague Wind Power
Facility Application for
Site Certificate**

Gilliam County, Oregon

Prepared for
Oregon Department of Energy

April 2010

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EXHIBIT A

Applicant Information

Email of April 14, 2010, with Articles of Incorporation

Attachment A-1 contains the articles of organization for Montague Wind Power Facility, LLC. The LLC is a single-member-managed entity. Iberdrola Renewables, Inc., will own 100 percent of the membership interests.

General Information About the Proposed Facility

Informal RAIs (Responses dated March 12, 2010)

Informal RAI Comment

B-9 describes 91 miles of collector; B-16 says the maximum length of collector is 76 miles. What is the correct maximum length of the collector system?

Response

The maximum length of the collector line depends on whether the overhead collector line is factored in. The maximum length of the underground collector line alone is 76 miles. The maximum length of the 34.5-kV collector system is 103 miles (76 miles of underground cables and 27 miles of aboveground lines).

Based on the preliminary layout, 76 miles of collector cables will be placed underground and 15 miles will run on overhead pole structures, for a total of 91 miles. However, as explained on pages B-9 and B-10, it may be necessary to place more of the collector lines currently shown as underground lines on aboveground structures due to site-specific conditions, resulting in more than 15 miles of aboveground collector lines. In order for the Department to evaluate the potential impact of aboveground collector cables, IBR proposed that no more than 27 miles, or 30 percent of the collector system as currently designed, be installed above ground; 30 percent of 91 miles is approximately 27 miles.

The statement on page B-16 is incorrect. It should read: "Under the worst-case scenario, the maximum length of the underground 34.5-kV collector cables will be approximately 76 miles."

Informal RAI Comment

B-9 describes the support structures for aboveground collector lines as "about 80 to 100 feet tall." B-17 describes the structures as having a total height of "approximately 56 feet." AA-2 describes the structures as up to 100 feet tall. What is the correct maximum height of these structures?

Response

The maximum height for the aboveground collector line support structures is 100 feet.

Informal RAI Comment

What is the maximum length of the SCADA lines? What is the maximum length of SCADA lines aboveground? Given that some of the collector line would be double circuit, would the SCADA lines on those segments be single lines (and thus, the overall length of SCADA would be less than the overall length of collector)?

Response

The maximum length of the total SCADA lines is 129 miles, as detailed below:

Length of the underground collector lines (76 miles)

+

Length of the maximum 30% overhead collector lines (measured as a single line of poles) (27 miles)

+

Length of 230-kV overhead lines (measured as a single line of poles) (the “home run” will have two SCADA lines and is counted twice) (26 miles)

= 129 miles.

The maximum length of the aboveground SCADA lines is 53 miles. This is equal to the total length described above minus the length of underground collectors (129 miles minus 76 miles) or 27 miles + 26 miles for a total of 53 miles.

The aboveground SCADA lines will be single lines on the double-circuit collector lines. Therefore, the overall length of aboveground SCADA will be less than the overall length of the aboveground 34.5-kV collector system combined with the 230-kV line.

Informal RAI Comment

B-10 says that there would be a “maximum of 34 junction boxes,” but it also says there would be 5 junction boxes for every 10 turbines. This would mean up to 135 junction boxes for 269 turbines. Table W-1 says there would be 54 junction boxes. What is the correct maximum number?

Response

The correct maximum number of junction boxes is 54.

Informal RAI Comment

B-5 says that turbine foundations would have a maximum of 41 cubic yards of concrete above 3 feet below grade; the total cubic yards in Table W-1 represents 46.7 cubic yards per turbine and the total cubic yards in Table W-2 represents 55.5 cubic yards per turbine. What is the correct maximum volume of concrete in foundations (above 3 feet below grade) for the 1.5-MW turbines and for the 3.0-MW turbines? (For now, we are assuming that site

restoration would require removal to 3 feet, but we plan to discuss this issue further with Jordan Maley to make sure that we correctly understand his letter).

Response

The concrete quantities listed in Exhibit B were calculated based on the assumption that concrete from the pedestal would be 0.5 feet above grade. The concrete quantities listed in Exhibit W were calculated based on the assumption that the concrete pedestal would be 1.0 feet above grade.

The correct concrete quantities are presented in Table W-1 and Table W-2.

The maximum volume of concrete in foundations (above 3 feet below grade) for the 1.5-MW turbine is 37.7 cubic yards. The maximum volume of concrete in foundations (above 3 feet below grade) for the 3.0-MW turbine is 46.5 cubic yards. In addition, approximately 9 cubic yards of concrete will be used to construct the transformer foundation at each turbine location. For Table W-1 the total concrete volume is 46.7 cubic yards, which is 37.7 cubic yards (foundation) + 9 cubic yards (transformer pad). Table W-2 shows a total concrete volume of 55.5 cubic yards, which is 46.5 cubic yards (foundation) + 9 cubic yards (transformer pad).

Informal RAI Comment

What type of met tower structures would be used (monopoles or lattice towers)?

Response

The met towers will be lattice structures.

Informal RAI Comment

Describe the lines and supports needed to supply electric and telephone service to the O&M buildings.

Response

Electric and telephone service will be delivered to the O&M building on a typical single-pole wood structure, similar to electric and telephone service to local residences.

RAI No. 1 (Responses dated March 29, 2010)

Comment B1

IBR requests "the flexibility to construct two turbine strings that were included in the LJF RfA as part of the Montague Wind Power Facility, if they are not constructed as part of the LJF." The application refers to Figure C-3, which shows the overlap of the LJII facility within the proposed MWPF site boundary. The map, however, does not identify the potentially affected LJII turbines that might become part of the MWPF. To better illustrate the flexibility

that IBR is requesting, provide a map based on Figure 2 in the LJII Request for Amendment #1 showing the proposed overlap of the MWPF within the site boundary of LJII.

Response to B1

Figure C-3a (Attachment B-1) shows the proposed overlap of the Montague Wind Power Facility (Facility) with the site boundary of Leaning Juniper II (LJII). The map illustrates by turbine ID number the LJII turbines that potentially could be built as part of the Facility.

Comment B2

The application describes the support structures for aboveground collector line as “wood or steel two-pole H-frame or wood or steel monopole support structures.” Where aboveground transmission lines turn a corner, special tangent or corner structures may be needed. Removal of these structures during site restoration may be more costly than removal of the H-frame or monopole structures. Provide a description of the tangent or corner structures that would be used and estimate the maximum number of such structures that would be used in the “worst case.”

Response to B2

The tangent or corner turning structures will consist of self-supporting steel or guyed wood. The self-supporting steel and guy anchors will require shallow concrete foundations. The cost for removal of the concrete foundations will be a minimal increase over the cost for removal of a typical overhead H-frame or monopole structure. The worst-case scenario would be 60 guyed or self-supporting steel turning structures. The worst-case scenario for the H-frame and single-pole transmission line turning structures is summarized below.

The H-Frame transmission line (wood or steel) in a lateral or straight configuration uses two poles with direct embedded foundations. The foundations consist of auger holes approximately 5 feet in diameter and 12 feet in depth that are backfilled with concrete slurry. The H-frame turning structure uses three poles with the same embedded foundation for each pole as the lateral configuration and additional guy lines for support. Guy lines are used in a 1 to 1 ratio for each conductor and shield wire in each direction of the turn. In a 90-degree turning structure, each pole will support one conductor and the two outside poles will also support one shield wire. There will be one guy wire for each conductor and shield wire parallel to the incoming direction and one guy wire for each conductor and shield wire parallel to the outgoing direction. In the typical H-frame turning structure, there will be 10 guy wires supporting the three-pole structure. Each guy wire is anchored using a power screw approximately 17 feet in length. These screws do not require concrete.

The single-pole transmission line in a lateral configuration uses a steel pole approximately 5 feet in diameter at the base and a concrete foundation 6 feet in diameter and 20 feet in depth. The single-pole turning structure uses a steel pole 7 feet in diameter at the base and a concrete foundation 8 feet in diameter and 35 feet in depth.

Email Response of April 20, 2010: Soil Protection Standard

Comment

We were expecting that IBR would respond to RAI G1 by providing a revised Table G-1 showing the quantities of materials “flowing into and out of” the proposed facility during operation over the life of the facility (or on a per-year basis). We are concerned about large quantities of the potentially hazardous materials on-site such as mineral oils, synthetic oils and ethylene glycol. Issues of concern are proper storage, proper handling to avoid spills and soil contamination, and proper disposal.

From the information IBR has provided, we cannot determine the quantities of these materials that would be on-site at any one time (in turbines or at the O&M facilities) nor the quantities that would need to be properly disposed of on an annual basis. For example, Table G-1 says that 10 gallons per turbine of synthetic oil would be stored in the O&M facilities (for use in turbines as needed). If 269 turbines are built, this implies that storage for approximately 2,700 gallons of oil would be needed. In Exhibit B, IBR states that “lubricants, oils, grease, antifreeze, degreasers, and hydraulic fluids” would be stored at the O&M facilities “in approved containers located aboveground,” but IBR does not describe the “containers.” In addition, IBR has not estimated the quantity of used “lubricants, oils, greases, antifreeze, cleaners, degreasers, or hydraulic fluids being held for delivery to a certified recycling transporter” that would be stored temporarily in the O&M facilities, and IBR has not described the storage methods for these materials. The response to RAI G1 states that turbines would receive at least an annual oil-change but does not give the quantity of used oil that would be drained from each turbine annually.

In RAI W1, we requested the quantity of oil contained in each turbine. Because IBR has requested a range of possible turbine types, we asked for the maximum amount in each turbine. IBR’s response states that “the maximum amount of oil contained in the turbines proposed at the Montague Facility ranges from 83 to 304 gallons.” We do not think that IBR intended to say that there would be 83 to 304 gallons in each turbine, but we are uncertain how to calculate a maximum per turbine amount given the information provided.

In Exhibit B, IBR states that “the production, use, storage, transport, and disposal of hazardous materials associated with the proposed Facility will be in strict accordance with federal, state, and local government regulations and guidelines,” but no applicable regulations and guidelines are discussed. To better understand the potential soil contamination risk, we request that IBR estimate the quantities of mineral oils, synthetic oils and ethylene glycol that would need to be properly disposed of on an annual basis. We request that IBR provide a more complete description of the proposed on-site storage containers and containment areas for both unused and used mineral oils, synthetic oils and ethylene glycol.

Response

Each site has a Spill Prevention Control and Countermeasures (SPCC) plan, as required by 40 CFR 112. The plan has been designed specifically to each site. Each SPCC plan aids in the prevention and containment of oils and hazardous substances. New oil product is

contained in DOT approved containers for which they were shipped, including the manufacturers label and stored on/in secondary containment inside the O&M building.

Although each turbine varies in the amount of oil it contains during operations (from 83 up to 304 gallons), the throughput of the oil and ethylene glycol is very little. On a quarterly maximum average, each O&M building stores approximately 330 gallons of new oil and about equal amounts of waste oil. The waste oil is commingled (hydraulic oil & gear oil).

The total estimated amount of annual through-put is between 1,350 and 2,500 gallons of oil, with the larger percentage being gear oil. Every 2 years, applicable sites might go through a 55 gallon drum of ethylene glycol.

The sites do not store mineral oil. Mineral oil is only found in the substation transformers and the GSU transformers. If oil in a transformer needs to be changed, the service is contracted-out and the vendor typically manages the oil. These transformers and their secondary containment requirements are describe in the site-specific SPCC.

The Hazardous Substance Survey is filed annually, as required by ORS 453.307 - 453.414. The survey includes the quantities of oil and the storage locations in addition to any other hazardous substance that we would be required to report. To date, that report includes the following: mineral oil, hydraulic oil, gear oil, and antifreeze.

Finally, under 40 CFR 261 we qualify as a Conditionally Exempt Small Quantity Generator (CESQG) of Hazardous waste and we manage our hazardous waste accordingly.

Email Response of April 20, 2010: Corner Turning Structures (Tangents) for Transmission Lines

Comment 1a

RAI B2 requested information about tangent or corner turning structures for transmission lines. While I was considering IBR's response, I realized that the phrasing of the request was ambiguous. RAI B2 begins by noting that the application describes the support structures for "collector lines." However, the RAI requests information regarding the types of structures and the maximum number of structures for the facility's "transmission" lines. IBR's response describes two types of tangent structures and states that "worst-case" there would be 60 such structures. It is unclear whether IBR's response was describing the 34.5-kV transmission lines (collector lines) or the 230-kV transmission lines, or both. To clarify this for us, can you get answers to the following:

- a. Do the two types of tangent structures described in IBR's March 29 response apply to 34.5-kV lines? If not, please provide a description of the tangent structures that would be used for 34.5-kV lines. Please include, specifically, a description of the concrete foundations (so that we can calculate cubic yards).

Response

The two types of turning structures described in IBR's March 29 response did not apply to 34.5kV transmission lines. A description of the 34.5kV turning structure is provided below.

Single and double circuit 34.5kV transmission lines in a linear configuration use a single, typically wood, pole structure with a direct embedded foundation. In a turning configuration, each circuit is independently supported by the same single pole structure and direct embedded foundation that is used in the linear configuration. The single pole 34.5kV turning structure also utilizes guy lines for additional support.

The typical wood single pole is 12–15 inches in diameter. The associated direct embedded foundation is typically 20-24 inches in diameter and 10 -11 feet in depth. The excavated foundation is primarily filled with the support pole itself. The remaining void is backfilled with the excavated soil and compacted as necessary. Unlike the 230kV single pole direct embedded foundation, non-structural, concrete slurry is almost never used as backfill for 34.5kV direct embedded foundations. This direct embedded foundation design is used for both the linear and turning 34.5kV structures. The only difference being that a single pole and foundation are used to support each circuit independently in a turning structure. Each turning structure will also have associated guy lines for added support. Guy lines are used in a 1-to-1 ratio for each conductor and shield wire in each direction of the turn. In a 90 degree turning structure, each pole will support three conductors and one shield wire. There will be one guy wire for each conductor and shield wire parallel to the incoming direction and one guy wire for each conductor and shield wire parallel to the outgoing direction. In the typical 34.5kV turning structure, there will be 8 guy wires supporting each single circuit, single pole structure. Each guy wire is anchored using a power screw approximately 17 feet in length. These screws do not require concrete.

Comment 1b

- b. Do the two types of tangent structures described in IBR's March 29 response apply to 230-kV lines? If not, please provide a description of the tangent structures that would be used for 230-kV lines. Please include, specifically, a description of the concrete foundations (so that we can calculate cubic yards).

Response

The two types of turning structures described in IBR's March 29 response apply to those used for 230kV transmission lines. Clarified descriptions of the H-Frame and Monopole 230kV turning structures are provided below.

The 230kV H-frame transmission line (wood or steel) in a linear or straight configuration uses two poles, each approximately 2-2.5 feet in diameter at the base, and direct embedded foundations. Direct embedded foundations are excavated holes filled primarily with the support poles themselves and backfilled with associated soil or non-structural concrete slurry. Concrete slurry is typically used when the associated soil cannot be sufficiently compacted due to foundation depth or soil properties. Linear 230kV H-frame foundations are approximately 5 feet in diameter and 12 feet in depth. The H-frame turning structure uses three poles and the same direct embedded foundation as the lateral configuration with additional guy lines on each pole for additional support. Guy lines are used in a 1 to 1 ratio for each conductor and shield wire in each direction of the turn. In a 90-degree turning structure, each pole will support one conductor and the two outside poles will also support one shield wire. There will be one guy wire for each conductor and shield wire parallel to

the incoming direction and one guy wire for each conductor and shield wire parallel to the outgoing direction. In the typical H-frame turning structure, there will be 10 guy wires supporting the three-pole structure. Each guy wire is anchored using a power screw approximately 17 feet in length. These screws do not require concrete.

The single-pole transmission line in a linear configuration uses a steel pole approximately 5 feet in diameter at the base and a direct embedded foundation 6 feet in diameter and 20 feet in depth. The single-pole turning structure uses a steel pole 7 feet in diameter at the base and a direct embedded foundation 8 feet in diameter and 35 feet in depth. The direct embedded foundations used for steel single-pole transmission lines typically use non-structural concrete slurry as backfill.

Comment 1c

- c. What is the maximum (“worst-case”) number of tangent structures for 34.5-kV lines and what is the maximum number for 230-kV lines?

Response

The maximum number of turning structures for the proposed Montague Facility by voltage:

34.5kV maximum turning structures = 72

230kV maximum turning structures = 25

Comment 1d

- d. We assume that tangent structures would replace regular support structures and would not be additional. Is that correct? For example, suppose 60 tangent structures are needed for the 34.5-kV lines, would that reduce the number of standard support structures for the 34.5-kV lines shown in Table C-2 (so that there would be 660 standard structures + 60 tangent structures)? Or, would the tangent structures be additional (720 standard structures + 60 tangent structures)? In other words, we need to know the maximum number of standard structures and the maximum number of tangent structures for each type of transmission line (34.5-kV lines and 230-kV lines).

Response

ODOE is correct in assuming that turning structures will replace standard structures and will not be additive to the estimated total structures included in Table C-2.

The total number of overhead 34.5kV structures is 720. Of these 720 structures, a maximum of 72 are expected to be turning structures.

The total number of overhead 230kV structures is 179. Of these 179 structures, a maximum of 25 are expected to be turning structures.

Proposed Location and Maps

Informal RAI (Responses dated March 12, 2010)

Informal RAI Comment

Provide Tables C-2 and C-3 in Excel format.

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010, with Excel versions of Tables C-2 and C-3 (see Attachment C-1).

Informal RAI Comment

Figures C-6 and C-7: Discussed at the meeting on 2/25. The maps are missing collector lines, access roads and staging areas for the 3.0-MW layout. IBR noted that the 3.0-MW layout provided in the LJII Request for Amendment #1 also did not show these components. We requested updated Figures C-6 and C-7.

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010, with updated Figures C-6 and C-7 (see Attachment C-1).

Permits Needed for Construction and Operation

RAI No. 1 (Responses dated March 29, 2010)

Comment E1

If a private water source (new or existing well) is used during construction (rather than the City of Arlington), would that source be a related or supporting facility? If the limited water use license is to be obtained by a third party, what facts support the conclusions that the third party has a “reasonable likelihood” of obtaining the permit and that IBR has a “reasonable likelihood” of getting an agreement with the third-party for access to the water?

Response to E1

If a private water source (new or existing well) is used during construction (rather than the City of Arlington), that source would not be a related or supporting facility because it would be used by multiple projects and County needs and would not be “but for” the Facility.

Comment E2

Gravel and washed rock would be “acquired by the construction contractor from existing or new commercial gravel pit sources.” Do sources currently exist that could supply all the gravel and rock needed? If a new quarry would have to be developed to supply rock and gravel, would the quarry be a related or supporting facility? If the permits needed to open a new quarry are to be obtained by a third party, what facts support the conclusions that the third party has a “reasonable likelihood” of obtaining the permits and that IBR has a “reasonable likelihood” of getting an agreement with the third-party for access to the gravel and rock needed for construction of the facility?

Response to E2

Yes, there are existing aggregate sources in the region that can provide all the gravel for the Facility. If a new quarry must be developed, the source would not be a related or supporting facility because it would be used by multiple projects and County needs and would not be “but for” the Facility.

Comment E3

If a new or existing concrete batch plant is used, would the batch plant be a related or supporting facility? If the permits needed to construct and operate a new batch plant are to be obtained by a third party, what facts support the conclusions that the third party has a “reasonable likelihood” of obtaining the permits and that IBR has a “reasonable likelihood” of getting an agreement with the third-party for access to the concrete needed for construction of the facility?

Response to E3

If a new or existing concrete batch plant is used, that source would not be a related or supporting facility because it would be used by multiple projects and County needs and would not be “but for” the Facility.

Property Ownership

Informal RAI (Response dated March 12, 2010)

Informal RAI Comment

Provide a list of the names and mailing addresses of all Morrow County property owners within 500 feet of the site boundary.

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010, with Table F-2, Morrow County Landowners within 500 feet of Proposed Site Boundary (see Attachment F-1).

Material Analysis

RAI No. 1 (Responses dated March 29, 2010)

Comment G1

Exhibit G calls for a materials analysis including an inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation. Table G-1 lists materials under the heading “Operations and Maintenance” but does not address the quantities “flowing into and out of” the proposed facility over the life of the facility (or on a per-year basis). Describe the disposal of used oils, antifreeze and the ultimate disposition of other materials listed in the table under “Operations and Maintenance”.

Response to G1

Spent (used) oils, lubricants, and antifreeze are generated as part of ongoing preventative maintenance on an as-needed basis. Turbines receive at least an annual oil change. Spent products are collected by a subcontractor and disposed of or recycled offsite at a licensed facility. The total disposal will be limited to the amount of material stored onsite, as spent material will be replaced with new material.

Informal RAI

B-7 says that herbicides would not be stored on-site; on page G-5 and in Table G-1, IBR says that pesticides would be stored in the O&M buildings. Is B-7 incorrect?

Response

IBR will subcontract out all weed control work and therefore will not store any herbicides onsite. B-7 is correct and Table G-1 incorrectly states that the “ultimate disposition” of Round-up and 2,4-D is “stored in O&M building(s)”.

Land Use

Informal RAIs (Responses dated March 12, 2010)

Informal RAI Comment

K-4 says there would be impacts to 222 acres of agricultural land. Table C-2 shows 237.3 acres; Table P-10 and P-11 show 220 acres. What is the correct number?

Response

The acres calculated for Table C-2 are greater than the acres calculated for Exhibits K and P because the calculations are tabular and therefore account for overlap/double counting. P-10 is less than C-2 because GIS removes overlap of permanent and temporary facilities. P-10 and P-11 are slightly different because for P-11 a worst-case layout is used. K-4 is more than P-11 because for P-11 acreage that GIS technically shows as an impact in Cat 1 habitat was removed. In summary, the differences in the calculations result from differences between GIS analyses and tabular calculations. To be conservative, a maximum of 237.3 acres could be used.

Informal RAI Comment

K-5 says that the facility complies with the applicable substantive criteria; K-22 says that the facility does not comply with GCDO Section 7.020(T)(4)(a)(10). The discussion at page K-33 implies that the facility also does not comply with GCDO Section 4.020(D)(14). Is K-5 incorrect?

Response

GCDO 4.020(D)(14) authorizes a commercial utility facility in the EFU base zone subject to conditional use review. GCDP 4.020(D)(14), however, states that a facility may not preclude more than 20 acres of non-high-value farmland from commercial agricultural enterprise, but GCDO 7.020(T)(4)(a)(10) provides that a wind energy facility is allowed on EFU land even if it exceeds 20 acres of non-high-value farmland subject to a Goal 3 exception. Therefore, given that the Facility will permanently impact more than 20 acres of non-high-value farmland soils, the Facility complies with all applicable substantive criteria subject to a Goal 3 exception under GCDO.

Informal RAI Comment

The ordinance (GCZO Section 7.020(T)(4)(a)(8)) requires a weed control plan addressing "preparation, construction, operation and demolition/rehabilitation." IBR proposes a Revegetation Plan similar to the one adopted for LJII. That plan, however, does not address

weed control during operation. Would IBR agree to a condition similar to Helix Condition 44?

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010: IBR would agree to a condition similar to Helix Condition 44.

Informal RAI Comment

GCCP Part 2, Policy 6 addresses erosion control. The application discusses erosion control during construction and revegetation, but not during operation. Would IBR agree to a condition similar to Helix Condition 82 and LJII Condition 75?

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010: IBR would agree to a condition similar to Helix Condition 82 and LJII Condition 75.

RAI No. 1 (Responses dated March 29, 2010)

Comment K1

Construction of the facility would take approximately 85 acres of cropland out of production (Table P-10). Explain why this loss of production would not result in a significant increase in the cost of accepted farming practices.

Response to K1

GCDO 4.020(H) provides the specific review criteria for conditional uses in the EFU zone, and as the County directed, IBR has addressed the review criteria in Section K.5.1.2 of Exhibit K. Specifically, the analysis demonstrating that the Facility will result in no significant change in accepted farming practices, or significantly increase the cost of farming practices, is discussed on pages K-8 and K-9. Removing 85 acres from crop production may result in some small-scale change to current farming practices, but when the total acreage of cropland production within the site boundary is considered, the overall impact is minimal. Further, farmers will still have access to large swaths of cropland and construction of new roads or improvements to existing roads will improve access to fields. Landowners are also compensated under wind leases, offsetting the removal of 85 acres from crop production. Accordingly, the loss of 85 acres of cropland will not result in a significant increase in the cost of accepted farming practices.

Comment K2

Discuss whether the County would have jurisdiction to grant a variance (to the County's requirement for gates on private access roads) if the site certificate is issued.

Response to K2

GCDO 7.020(T)(d)(6) requires that private access roads be gated to protect the Facility and property owners from illegal or unwarranted trespass, illegal dumping, and hunting. For the most part, gates will be located at the entrance of Facility access roads. However, if a landowner does not want a gate on a private access road, a variance to GCDO 7.020(T)(d)(6) under GCDO 9.030 is warranted in such circumstance. The requirement for gates on private access roads protects the Facility and the property owner (other GCDO requirements address health and safety issues for the protection of the public). Consequently, if a landowner does not want a gate for property protection, IBR is willing to concede to the landowner that the gate would create more practical difficulties for the private landowner than public benefit. In addition, this circumstance would only arise at the landowner's request, meaning that the situation would not be created by IBR. Finally, requiring IBR to place a gate on a private access road where an underlying landowner objects could create an unnecessary hardship on IBR and potential damage to the landowner relationship. Therefore, should a landowner object to a gate on a private access road, a variance to this requirement is warranted under GCDO 9.030(A)-(D).

The GCDO allows the County to grant an unqualified variance or grant a variance subject to prescribed conditions, but under ORS 469.504(1)(b), EFSC has stepped into the County's role in determining whether the Facility complies with the applicable substantive requirements in the GCDO. Accordingly, in addition to making findings pursuant to GCDO 7.020(T)(d)(6), IBR requests that EFSC also make findings under GCDO 9.030 allowing a variance to GCDO 7.020(T)(d)(6) but only in circumstances where the landowner objects to the gate. Under this approach, EFSC will determine that the Facility complies with GCDO 7.02(T)(d)(6) subject to conditions in the Site Certificate, or alternatively, the requirement is waived by a variance subject to a prescribed condition.

Comment K3

K-34 says that the calculation of "high-value farmland" was based on a "conservative" assumption that various listed soil types are irrigated. If non-irrigated soils are properly classified (as non-high-value), how would that change the data shown in Table K-1? How would it change Figure K-6?

Would the facility interfere with irrigation on "high-value farmland?"

[Note, if you provide a new Figure K-6, please use higher-contrast colors to help us distinguish between soils that are "high value" and soils that are not "high value."]

The Notes to Table K-1 state that this table is based on Figure P-9. Figure P-9, however, shows the maximum habitat impact layout. A layout with the maximum wildlife habitat impact is likely to show the least impact on high value farmland. The "current layout" for the maximum number of turbines (Figure C-4) would be a better basis for calculating the "high value farmland" impacts.

The Notes to Table K-1 also indicate that 6.9 acres of Class VII soil areas are not included in the totals shown in the table. Class VII areas should be included as "non-high-value farmland." The Council has treated Class VII and VIII soils as agricultural land (see discussion in the Final Order on Amendment #1 for LJII at page 22).

Provide a revised Table K-1 that includes the Class VII areas and that reflects the proper classification of non-irrigated soils.

Response to K3

Figure K-6 has been revised. In this revised figure, soil classes are categorized based on whether the soil is actually irrigated (rather than conservatively assuming that all soils within the site boundary are irrigated). As a result, the amount of high-value farmland soils within the site boundary decreased by approximately 96 acres. Of the acres of high-value farmland soils within the site boundary, only 271 of these acres are irrigated and only a little more than 2 acres will be permanently impacted as shown in Application for Site Certificate (ASC) Table P-10 and Figure P-7. Further, rather than excluding Class VII soils from non-high-value farmland soils, Table K-1 has been revised so that non-high-value farmland soils include Class III-VII soils. Table K-1 values were revised based on the acreage of impacts for the current layout from Figure C-4 rather than on the basis of the acreage of impacts for the worst-case scenario layout from Figure P-9. Accordingly, the acreage of impacts to high-value farmland soils has decreased and the resulting numbers represent the actual impact to high-value farmland soils within the site boundary.

Comment K4

The Gilliam County Planning Department directed two comment letters to the Oregon Department of Energy on February 26 and March 8, 2010, respectively. The letters affirm the Planning Department's request that the Department of Energy consider and incorporate into the proposed order and site certificate select Gilliam County land use ordinance criteria as specified in the March 8 letter.

Response to K4

Copies of the letters from the Gilliam County Planning Department are provided in Attachment K-1. IBR has reviewed the letters and confirmed that the County's comments, including the identified relevant substantive criteria, are addressed in the ASC and in the Request for Additional Information (RAI) responses.

Email Response of April 2, 2010: Revised Table K-1, High-Value Farmland

Attached is a revised Table K-1 [see Attachment K-1], showing actual footprint in HV and non-HV land without overlap. The total impacts in this table do not exactly match any other table in the ASC because each table is generated out of GIS based on slightly different criteria; for example, you note that the total footprint shown in Table P-10 is slightly lower than what is shown in revised Table K-1. This is because the construction buffer used for these calculations shows impacts to Category 1 habitat, although in the field these areas would be flagged and no impacts would occur. Since no impacts to Cat 1 habitat would occur, those numbers were removed from Table P-10. Table K-1 is slightly more conservative in that no GIS-calculated impacts to HV and non-HV acres were removed from the total estimate.

Email Response of April 21, 2010: Land Use Standard

Comment 1

In RAI K2, we requested a discussion of County jurisdiction to grant a variance to GCZO Section 7.020(T)(4)(d)(6), which requires that private access roads to a wind power generating facility be gated. In response, IBR assumed that the Siting Council, not the County, would have jurisdiction to decide whether or not a variance should be granted. IBR cited ORS 469.504(1)(b), which describes the procedure for the Siting Council to make findings of compliance with the statewide planning goals. IBR proposed that the Council either grant a variance subject to a condition in the site certificate “but only in circumstances where the landowner objects to the gate” or, alternatively, grant a variance waiving the County ordinance “subject to a prescribed condition.”

We do not believe that either approach could be implemented in a site certificate condition, and IBR has not proposed any condition language. IBR has not identified any property owner who has in fact objected to a gate being built on their property. Under GCZO Section 9.010, a variance may be authorized “where it can be shown that owing to special and unusual circumstances related to a specific lot, strict application of the ordinance would cause an undue or unnecessary hardship.” From the information IBR has provided, there is no basis for the Siting Council to make such a determination, and there is no way for the Council to hypothesize all “special and unusual circumstances” by which a variance might be granted by site certificate condition.

After considering this matter further, we believe that a decision on a variance to GCZO Section 7.020(T)(4)(d)(6) is not essentially a decision about compliance with the statewide planning goals. Whether to grant a variance is a matter of the County enforcing its own public safety code. Accordingly, granting a gate variance is not a matter to be “included in and governed by the site certificate.” Therefore, under ORS 469.401(4), we will recommend to the Council that the decision whether to grant a variance to the ordinance should be left to the County to decide on a case-by-case basis as the need arises. The County is in the best position to determine under what conditions the policy underlying the ordinance would be served by granting a variance. We have discussed this approach with Susie Anderson, Gilliam County Planning Director, and she is in agreement with this recommendation.

Response

IBR agrees with this recommended approach and will pursue a variance with Gilliam County should one be needed in the future.

Comment 2

In RAI K3, we requested a re-assessment of high-value (HV) farmland within the proposed site boundary. For soil types that would be HV farmland only if irrigated, we requested that IBR determine how many acres are, in fact, irrigated. We also requested that all Class VII and Class VIII soils be inventoried as non-HV agricultural land. IBR submitted a revised table K-1 in the initial RAI response (March 29, 2010) but later replaced this with a further revised Table K-1 (April 2, 2010) after the Department noted discrepancies in the data. Based

on this final revised Table K-1, only 2.35 acres of HV farmland would be occupied by MWPF components based on the current layout (Figure C-4). IBR also provided a revised Land Capability Classification map (Figure K-6) showing the location of the HV soils within the site boundary.

OAR 660-033-0130(37)(a)(A) requires the applicant to consider “reasonable alternatives” to locating the facility, or components of the facility, on high-value farmland. The analysis used to justify impacts on HV farmland in several recent site certificate orders was based on findings that no reasonable alternatives to impacts on HV farmland were available. In those cases, the Council found that there were multiple pockets of HV farmland interspersed with non-HV soils. The Council found that there were no large, contiguous areas of non-HV farmland within the wind resource area that were of sufficient size to locate the proposed wind energy facilities. The Council has found that an alternative location or configuration of a proposed wind power generation facility on land that does not contain HV farmland soils is not a “reasonable” alternative if the location or configuration would significantly increase the area within the site boundary, significantly increase the area permanently occupied by the facility’s components or significantly increase the length of aboveground transmission lines that are necessary to connect the wind facility to the regional power grid.

Based on the revised Figure K-6, it appears that there are only a few small pockets of HV farmland within the proposed MWPF site boundary. These HV farmland areas appear to be limited to a small areas of Class II soil (colored bright yellow), mostly within Eightmile Canyon. There appears to be sufficient adjacent non-HV farmland where proposed facility components could be located within the proposed site boundary.

The justifications given in the site certificate application for concluding that there are no reasonable alternatives to locating facility components on HV farmland were based on IBR’s earlier assumption regarding irrigation of areas that are not, in fact, irrigated (Application, Exhibit K, pp. 34-37). Although IBR’s justifications might have been valid under the assumption that there were 1,314 acres of Class I HV soils and 9,801 acres of Class II HV soils within the site boundary (Application, Exhibit K, p. 34), these justifications do not apply when there are in fact very few areas of HV soil within the site boundary (the total acres of HV farmland within the site boundary under the revised calculation is unclear; IBR’s statement in the response table that the amount of HV soils “decreased by approximately 96 acres” seems inconsistent with what is shown in the revised Figure K-6).

We propose that IBR microsite the facility components to avoid all HV farmland within the site boundary, and we would recommend that the Siting Council adopt a site certificate condition to that effect. Alternatively, if IBR cannot accept such a condition, then we request a revised justification explaining why the Council should conclude that there are no reasonable alternatives to locating facility components on HV farmland, considering the very limited areas of HV farmland shown in revised Figure K-6.

Response

In response to RAI K3, IBR recalculated the acreage of high-value and non-high-value farmland soils within the site boundary based on whether the soil was actually irrigated (rather than conservatively assuming that all soils within the site boundary are irrigated, as had been done for past projects like Helix and Leaning Juniper II). In addition, rather than

separating out Class VII and VIII soils, IBR included these soils within the non-high-value farmland soil calculations. Revised Table K-1 submitted in response to RAI K3 summarizes the total permanent impacts to high-value and non-high-value farmland soils based on these revised calculations.

The narrative response to K3, however, mistakenly states that the total amount of high-value farmland soils within the site boundary was reduced by 96 acres. In actuality, and as summarized below, 96 acres is the decrease in permanent impacts to high-value farmland soils when the conservative assumption is not used. Further, the RAI response states that “of the acres of high-value farmland soils within the site boundary, only 271 acres of these acres are irrigated and only a little more than 2 acres will be permanently impacted.” This statement mischaracterizes the irrigated acreage as being all high-value farmland soils. As shown by the revised calculations, based on the NRCS soil types and the soils currently irrigated within the site boundary, the total high-value farmland soil acreage is less than 271.

What this means is while there may be 271 acres of irrigated land within the site boundary (as determined during the habitat work, and illustrated on Table P-10 and Figure P-7 in the ASC), not all irrigated land is high-value farmland soils based on the underlying NRCS soil types. This conclusion was confirmed with Jordan Maley, the OSU extension agent for Gilliam County by Elaine Albrich on April 20, 2010. Mr. Maley said that while it may not be the best economically (given soil productivity), farmers will irrigate non-high-value farmland soils within a crop circle, and consequently, it is correct to say that just because farmland is irrigated doesn't mean that it is high-value farmland soil.

Old Numbers: Exhibit K states that there are approximately 33,402 acres of EFU land within the site boundary. Of those 33,402 acres, 1,314 acres are Class I soils, 9,801 acres are Class II soils, and 22,287 acres are non-high-value farmland soils. See page K-34 of Exhibit K. As described above, the Class I and Class II soils were calculated using the original assumption that all soil types were irrigated. Original Table K-1 showed that out of the 11,115 acres of high-value farmland soils, 98.179 acres would have been permanently impacted. After taking into account what is actually irrigated currently, these numbers changed considerably.

New Numbers: Out of the 33,402 acres within the site boundary (recognizing that the rounding and GIS layers make the numbers below total 33,403 acres):

Class I soils = 0 acres

Class II soils = 186 acres

Class III-VIII soils = 33,217 acres

Out of the 186 acres of high-value farmland soils, 2.351 acres will be permanently impacted. Out of the 33,217 acres of non-high-value farmland soils, 218.998 acres will be permanently impacted. See Revised Figure K-1.

Analysis under OAR 660-033-0130(37): IBR previously employed a conservative assumption when analyzing compliance with OAR 660-033-0130(37). The conservative assumption (assuming that all soil types were irrigated) resulted in more land within the site boundary being deemed high-value farmland soils. See Original Figure K-6. This

method allowed findings to be based on the “worst-case scenario” for impacts to high-value farmland soils, meaning that there was no risk of having non-high-value farmland soil “bump up” to a high-value farmland soil if a landowner began irrigating it but not having this amount accounted for in the impact calculations.

Under the calculation method requested in RAI K3, the calculation is not based on a worst-case scenario but rather a snap-shot in time. The soil classes are based on what is irrigated at the time of the surveys. IBR is agreeable to using this requested approach for the basis of findings under OAR 660-033-0130(37) as long as ODOE does not require re-surveying to confirm that there have been no changes in irrigation prior to construction. In other words, there is an understanding that the basis for calculating permanent impacts to farmland soils and findings of compliance with OAR 660-033-0130(37) is based on a one-time examination of what soils are irrigated within the site boundary.

Based on the revised calculations, the amount of high-value farmland soils within the site boundary totals 186 acres. There are only three concentrations of high-value farmland soils within the site boundary, and only one area would be permanently impacted, as shown on Figure K-6a (detailed view provided in Attachment K-1). Specifically, an access road and overhead 34.5-kV collector line structures would permanently impact 2.351 acres of high-value farmland soils (2.348 and 0.003 acres, respectively).

The impacts associated with the access road are from improvements to the existing County road (Eight Mile Canyon Road) within an existing County right of way that runs through high-value farmland soils. See Figure K-6a in Attachment K-1. The majority of the high-value farmland soils are located on the east-side of the road, although there is also a thin swath of high-value farmland soils on the west-side of the road. Avoiding impacts to these areas would mean having to re-route the existing County road outside of the current County road right-of-way. To avoid the majority of the high-value farmland soils, the road would need to be moved further west, but this adjustment would cause the road to run straight through Category 1 WGS habitat (see the identified area on Figure K-6a in Attachment K-1).

Alternatively, the road could be re-routed to the east but this would require moving the road beyond the majority of the high-value farmland soils. This re-route would result in greater acreage impacts given that the route would be less direct and increase in length.

Either re-route option would increase disturbance because either option would not use the existing road and right-of-way and either option would be a less direct route. Finally, re-routing a portion of the existing County road would require coordination and consultation with the County and does not seem to be something that is contemplated under OAR 660-033-0130(37) given the reference to use of existing rights-of-ways under subsection (a)(A)(ii). Therefore, even though this portion of the Facility would be located on high-value farmland soils and reasonable alternatives have been considered, the proposed access road route is allowed given the factors in OAR 660-033-0130(37)(a)(A).

With respect to the 0.003 acres of impact associated with the overhead collector line poles, the collector line is routed to cross Eight Mile Canyon Road in the vicinity of the impacted area of high-value farmland in order to avoid greater environmental impacts. Specifically, the collector line cannot be routed on the west side of the road because it would need to be sited within the Category 1 WGS habitat. IBR recognizes that this re-route may be shorter in

length and eliminate one of two stream crossings, it is not feasible to span the line across the Category 1 habitat but given the engineering and site conditions. See Figure K-6a in Attachment K-1. Therefore, even though this portion of the Facility would be located on high-value farmland soils and reasonable alternatives have been considered, the proposed collector line route is allowed given the factors in OAR 660-033-0130(37)(a)(A).

For these reasons, IBR believes the Facility compiles with OAR 660-033-0130(37), and although alternatives were considered, the proposed layout is the most reasonable after considering of the factors outlined in OAR 660-033-0130(37)(a)(A). IBR request the Council approve the layout of the Facility as proposed and not impose a condition requiring avoidance of the 2.351 acres of high-value farmland soils within the site boundary.

Protected Areas

Email Response of April 21, 2010: Protected Area Standard

Comment

Exhibit L of the application omitted discussion of the Willow Creek Wildlife Area, which is a protected area under OAR 345-022-0040(1)(p). In addition, State parks and waysides "listed" by OPRD are protected areas under OAR 345-022-0040(1)(h). In a comment letter (RAI RAC2), OPRD identified Arlington, John Day (Hildebrand) and Cottonwood Canyon as State parks. We have requested clarification from OPRD as to whether these parks are considered "listed" and also clarification of the status of the "J.S. Burres" area shown on the map provided by OPRD. We request that IBR supplement the application with a brief discussion about any potential impacts on the parks OPRD identified in the comment letter and on the Willow Creek Wildlife Area.

Response

As requested, this response supplements the application with a brief discussion of potential impacts on the parks identified by the Oregon Parks and Recreation Department (OPRD) in the RAI RAC2 comment letter, and on the Willow Creek Wildlife Area.

IBR's analysis in Exhibit L of the ASC did not identify any significant potential impacts to the four protected areas listed in Table L-1 of Exhibit L in the ASC. IBR's supplemental analysis of the Willow Creek Wildlife Area, Arlington wayside (referred to as a state park in IBR's response to RAI RAC2; see Attachment 14 of the RAI responses submitted on March 29, 2010 [Exhibit R of this Supplement: subsection titled Reviewing Agency Comments from Oregon Parks and Recreation Department]), John Day (Hildebrand) property (referred to as a state park in the RAI RAC2 response), and Cottonwood Canyon State Park results in a similar conclusion. The MWPF will not result in significant adverse impacts to these more recently identified protected areas from noise, traffic, water use, wastewater disposal, or visual impacts.

The Willow Creek Wildlife Area, Arlington wayside, John Day (Hildebrand) property, and Cottonwood Canyon State Park are all located at greater distances from MWPF than the four protected areas previously identified by Table L-1 in the ASC. The Willow Creek Wildlife Area is located approximately 8 miles northeast of MWPF on Willow Lake at the mouth of Willow Creek. The Arlington wayside is located approximately 6.3 miles north of MWPF on I-84 and the Columbia River (see revised Figures R-1 and T-1 in Attachment 14 of the RAC2 response [Attachment T-1 in this Supplement]). The John Day Hildebrand property, owned by OPRD, is located along the John Day River approximately 5 miles east of MWPF (see revised Figures R-1 and T-1). Finally, Cottonwood Canyon State Park comprises separate parcels recently acquired by OPRD and located adjacent to the John Day River approximately 8 miles from MWPF (see revised Figures R-1 and T-1). The property for

this park is directly adjacent to and eventually will encompass the J.S. Burres State Park, which is currently managed by the BLM (Houck, 2010).

Noise. There will be no impacts from noise on the four more recently identified protected areas. As detailed in Exhibit X of the ASC, projected noise levels resulting from construction and operation of MWPF will meet requirements contained in Oregon Department of Environmental Quality rules. Given projected noise levels and the distance between turbine locations and protected areas, noise resulting from MWPF construction and operation will not significantly affect any protected areas in the 20-mile analysis zone.

Traffic. Increased traffic resulting from MWPF construction or operation will not adversely impact the four more recently identified protected areas. The primary transporter route identified in Exhibit L of the ASC will be eastbound Interstate 84 (I-84) and southbound on Oregon Highway 19 (OR 19; also known as John Day Highway) near Arlington, Oregon. This route does not go through or near any of these protected areas. The two alternative transporter routes include eastbound I-84 and southbound on either Blaylock Canyon Road or OR 74. The Blaylock Canyon Road route also does not go through or near any of these protected areas. The second alternative route passes near the Arlington wayside, but does not pass through or near any of the other three recently identified protected areas. The segment of this alternative route that passes near the Arlington wayside is along I-84, which is a main east-to-west corridor in the United States. Thus, any traffic volume using this alternative route for construction or operation of the MWPF will be minimal compared to the existing volume on I-84.

Water. Water use for MWPF will not impact any of the four more recently identified protected areas. The water sources identified in Exhibit L of the ASC (City of Arlington and well within MWPF site boundary) are not on or near these protected areas.

Wastewater. Wastewater from MWPF will not impact any of the four more recently identified protected areas for the same reasons explained in Exhibit L of the ASC. The few potential wastewater sources identified in Exhibit L are not located on or near any of these protected areas.

Visual. Construction and operation of MWPF will not result in visual impacts to any of the four more recently identified protected areas. Again, the John Day (Hildebrand) property is the protected area nearest MWPF, located approximately 5 miles from the nearest portion of the site boundary that will contain turbines. Thus, any visible turbines will appear as smaller elements in the background at these distances (5 miles or greater). In addition, the zone of visual impact (ZVI) analysis presented in Figures L-1 and L-2 in Exhibit L of the ASC, and in the revised Figure R-1 provided in Attachment 14 to the RAC2 response [Attachment T-1 in this Supplement], was revisited to determine whether any turbines will be visible from these protected areas.

The ZVI shows that MWPF will not be visible from Arlington wayside, John Day (Hildebrand) property, or Cottonwood Canyon State Park. In addition, the Arlington wayside is also located along the Columbia River with views directed north toward the river and away from MWPF. The John Day (Hildebrand) property and Cottonwood Canyon State Park are situated directly adjacent or near the John Day River. Thus, views will be blocked by the steep topography adjacent to the river. The ZVI shows that small areas within the Willow

Creek Wildlife Area may have limited views of turbines. However, the portion of this protected area located nearest MWPF will be approximately 8 miles from the portion of the site boundary that will contain turbines. Thus, distance will greatly diminish the visibility of any turbines. In addition, this wildlife area is located adjacent to the Columbia River, north of MWPF. The majority of views in the wildlife area are focused away from MWPF either north toward the Columbia River or across Willow Lake to the east or west. Views of MWPF turbines would have to focus south.

The design, construction, and operation of MWPF are not likely to result in significant adverse impacts to the four more recently identified protected areas. Because there are no significant adverse impacts, no mitigation is proposed.

Reference:

Houck, Jan. 2010. Personal communication via telephone between Jan Houck (Oregon Parks and Recreation Department) and Paul Seilo (CH2M HILL) on March 9.

Comment

In Exhibit L, IBR discussed potential noise impacts on nesting long-billed curlews in the Horn Butte ACEC (Application, Exhibit L, p. 3). IBR reasoned that because the Siting Council has previously found that the Shepherds Flat project is “not expected to be a significant source of disturbance to nesting long-billed curlews or to other nesting avian species” in the Horn Butte ACEC, the Council should also find that proposed MWPF would not cause a significant disturbance “because the approved Shepherds Flat facility is located closer to the Horn Butte ACEC than the proposed Facility.” Horn Butte ACEC, however, consists of several separate parcels of BLM land, some of which appear to be immediately adjacent to the proposed MWPF site boundary.

The Council’s previous finding with regard to the potential noise disturbance to nesting curlews from the Shepherds Flat project was subject to a site certificate condition that prohibited construction activity within a half-mile of the area during the curlew nesting season (March 8 through June 15). Would IBR accept a similar site certificate condition with regard to the MWPF?

Portions of the John Day State Scenic Waterway lie within the scenic resources analysis area for MWPF, as shown on Figure R-1. We propose to make the same recommended findings for MWPF as were made for Leaning Juniper II with regard to the John Day State Scenic Waterway.

Response

IBR proposes the following site certificate condition to protect nesting long-billed curlews similar to the protection implemented for nesting raptors. This condition is similar to Condition 86 from the Leaning Juniper II First Amended Site Certificate.

During construction of the facility, within the wind-leased lands, the certificate holder shall protect the area within 1300-feet of the BLM Horn Butte ACEC during the nesting season (March 8 through June 15). Before beginning construction, the certificate holder shall provide to the Department a map showing these avoidance areas relative to areas of potential construction disturbance. The certificate

holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) or allow high levels of construction traffic within 1300 feet of the ACEC. In addition, the certificate holder will flag the boundaries of the 1300-foot buffer area and shall instruct construction personnel to avoid any unnecessary activity within the buffer area. The certificate holder may engage in construction activities in these areas at times other than the nesting season.

Financial Analysis

Email Response of April 21, 2010: Financial Assurance

Comment (dated March 4, 2010)

In our list of corrections and clarifications (March 4, 2010), we requested a financial assurance “comfort letter” in an amount equal to or greater than the Department’s estimate of site restoration costs. We have not reached a final calculation of site restoration costs, but based on our preliminary estimate, we anticipate that site restoration costs will not exceed IBR’s highest-cost estimate (excluding offset for scrap value) of \$21.219 million (Exhibit W, Table W-1). We therefore request that IBR provide a “comfort letter” or other evidence that IBR has a “reasonable likelihood” of obtaining financial assurance in that amount.

Response (final response dated April 21, 2010)

A “comfort letter” of reassurance is provided in Attachment M-1.

Water Resources

Informal RAI (Response dated March 12, 2010)

Comment

Provide a signed copy of the letter from Tim Wetherell (on City of Arlington letterhead, if available).

Response

Attachment O-1 contains a signed copy of the letter from Tim Wetherell on City of Arlington letterhead (see Attachment O-1).

Fish and Wildlife Habitats and Species

Informal RAIs (Responses dated March 12, 2010)

Informal RAI Comment 1

When did NWC initiate the “avian use surveys at six additional plots”? When were these completed? Are these the “2009 Fall Season Montague Avian Use Surveys” described at page 8 of [ASC] Attachment P-7?

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010, with a table of onsite surveys to be completed. As shown in item number 6 of the survey table, fall season avian use surveys of six plots (AA, BB, EE, FF, GG, and HH) began on September 10, 2009, and could continue for one full year. See revised survey table provided in Attachment P-1.

Informal RAI Comment 2

Provide Tables P-10 and P-11 in Excel format.

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010, with Excel versions of Tables P-10 and P-11 (“20a” and 20b”). (See Attachment P-2.)

Informal RAI Comment 3

P-70 says that there have been no long-billed curlew fatalities found at any existing wind facilities; Attachment P-7, page 44, says that one long-billed curlew fatality was found at Pebble Springs. Is P-70 incorrect?

Response

Response e-mailed to John White/ODOE and Kara Warner/Golder on March 5, 2010: The latter sentence is correct. No long-billed curlew fatalities had been found at existing wind facilities according to final public fatality monitoring reports (page P-70). However, one long-billed curlew fatality recently was found at Pebble Springs and will be reported in the final fatality monitoring report.

RAI No. 1 (Responses dated March 29, 2010)

Comment P1

This RAI and the others below that are marked as “{future study}” address on-site surveys described in the application that have not been completed to date. Provide a schedule for the completion of these studies (including completion of data analysis and written reports and expected dates of submission of the information to the Department).

If the Department finds the application to be complete (except for these studies) before all of the studies are done, the Department will consider addressing the completion of studies by appropriate site certificate conditions, provided that the mitigation of potential impacts is adequately addressed.

{future study} The application describes a “focused botanical survey” that needs to be completed. What is the scope of this survey? When would the survey be done? When would IBR report the results to the Department?

IBR may propose condition language for use if the Department finds the application is otherwise complete before the survey results have been reported. Proposed condition language should address mitigation for any potential impacts identified by the survey.

Response to P1

1. Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] contains a schedule of onsite surveys to be completed. Please refer to row 1 in the Attachment P-1 schedule.
2. Noted.
3. Please refer to Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] for a description of the scope and timing of the surveys. The report would be provided to the Department prior to construction, as described in the proposed condition below.
4. Condition Language: IBR proposes a SC condition similar to the Helix SC condition 91 to address the preconstruction surveys discussed in RAI P1-P6:

The certificate holder may construct turbines and other facility components within the site boundary as described in the Final Order on the Application, subject to the following requirements addressing potential habitat impact:

- a) *The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.*
- b) *Before beginning construction, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility, the areas that would be disturbed during construction, and the areas that were surveyed in 2010 or earlier as described in the site certificate application. The certificate holder shall hire a qualified professional biologist to conduct a preconstruction biological investigation of all areas to be disturbed during construction that lie outside of the areas surveyed in 2010 or earlier. The certificate holder shall provide a written report of the investigation to the Department and to the Oregon Department of Fish and*

Wildlife (ODFW). Based on consultation with the Department and ODFW, the certificate holder shall implement appropriate measures to avoid impacts to any Category 1 habitat or to any State-listed plant or wildlife species found during the investigation.

- c) Before beginning construction, the certificate holder's qualified professional biologist shall survey the edge of the previously-identified Washington ground squirrel colony to ensure that the sensitive use area is correctly marked with exclusion flagging and avoided during construction. The certificate holder shall maintain the exclusion markings until construction has been completed.*
- d) Before beginning construction, the certificate holder shall hire a qualified professional biologist to conduct a pre-construction raptor nest survey within a half-mile buffer of the final transmission line route and within a two-mile buffer of the turbines in all areas that were not previously surveyed as described in the site certificate application. The purpose of the survey is to identify any sensitive raptor nests near construction and to provide baseline information on raptor nest use for analysis as described in the Wildlife Monitoring and Mitigation Plan.*
- e) In the final design layout of the facility, the certificate holder shall locate facility components to avoid or minimize temporary and permanent impacts to high quality native habitat and to retain habitat cover in the general landscape where practicable.*

Comment P2

{future study} The application describes “special status wildlife surveys” that need to be completed. What is the scope of these surveys? When would they be done? When would IBR report the results to the Department?

IBR may propose condition language for use if the Department finds the application is otherwise complete before the survey results have been reported. Proposed condition language should address mitigation for any potential impacts identified by the surveys.

Response to P2

Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] contains a schedule of onsite surveys to be completed. Please refer to row 4.

Comment P3

{future study} The application describes “surveys for the remaining area within the Facility 2-mile raptor survey radius” (approximately two-thirds of the study area) that need to be completed. The application describes both aerial raptor surveys and walking transect surveys for raptor nests. What is the scope of these surveys? When would they be done? When would IBR report the results to the Department?

IBR may propose condition language for use if the Department finds the application is otherwise complete before the survey results have been reported. Proposed condition language should address mitigation for any potential impacts identified by the surveys.

Response to P3

Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] contains a schedule of onsite surveys to be completed. Please refer to rows 4 and 5.

Please refer to response P1, no. 4, for proposed condition language.

Comment P4

{future study} The application describes “the remaining three seasons of avian use studies” that need to be completed. What is the scope of these studies? When would they be done? When would IBR report the results to the Department?

IBR may propose condition language for use if the Department finds the application is otherwise complete before the survey results have been reported. Proposed condition language should address mitigation for any potential impacts identified by the survey.

Response to P4

Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] contains a schedule of onsite surveys to be completed. Please refer to row 6.

Please refer to response P1, no. 4, for proposed condition language.

Comment P5

{future study} The application describes “ground transect surveys” that need to be completed. What is the scope of these surveys? When would they be done? When would IBR report the results to the Department?

IBR may propose condition language for use if the Department finds the application is otherwise complete before the survey results have been reported. Proposed condition language should address mitigation for any potential impacts identified by the surveys.

Response to P5

Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] contains a schedule of onsite surveys to be completed. Please refer to rows 4 and 5.

Please refer to response P1, no. 4, for proposed condition language.

Comment P6

{future study} The attachment describes revisits to previously identified WGS holes as well as surveys of previously unsurveyed corridors for WGS. What is the scope of these surveys? When would they be done? When would IBR report the results to the Department?

IBR may propose condition language for use if the Department finds the application is otherwise complete before the survey results have been reported. Proposed condition language should address mitigation for any potential impacts identified by the surveys.

Response to P6

Attachment 4 [subsequently updated and provided as Attachment P-1 in this Supplement] contains a schedule of onsite surveys to be completed. Please refer to row 3.

Please refer to response P1, no. 4, for proposed condition language.

Comment P7-1

Current ODFW guidance (letter from Rose Owens, December 3, 2009) states that “a single occupied WGS burrow and a 785-foot buffer of suitable habitat around the burrow, would all be considered Category 1 habitat, since it is all considered required habitat for squirrel survival.” ODFW has defined a “colony” as “the cluster of holes as well as the required habitat for squirrel survival” and ODFW defined “required habitat for squirrel survival” as the area “depicted by a 785-foot ring around the outside of the cluster of holes where the Washington ground squirrels are residing” (letter from Rose Owens, September 15, 2008, included in the application as Attachment P-2). ODFW has advised that “the Category 1 required habitat for squirrel survival can be less than 785 feet from the outer edge of clusters of holes when interrupted by habitat types not suitable for foraging or burrow establishment.”

This issue was discussed at the meeting on 2/25/10. Confirm for the record that IBR applied the current ODFW guidance regarding a 785-foot buffer around WGS burrows for all identified WGS detections listed, except WGS Sites #5, #8, #13 and #25. Thus, any inconsistency between IBR’s Montague application and current ODFW guidance is limited to these four sites. Provide further explanation if this is not correct.

Response to P7-1

IBR applied a 785-foot buffer around all identified WGS sites with multiple burrows. However, IBR did not apply the 785-foot buffer to WGS Sites #5 and #8 because these sites are single burrows, not colonies. In addition, IBR mistakenly applied a 785-foot buffer around WGS Site #13, although this site is also a single burrow. The corrected buffer is shown in a new Figure Q-2c provided in Attachment P-3 [CONFIDENTIAL].

IBR applied the 785-foot buffer in suitable habitat around all other sites.

Any inconsistency between IBR’s Montague application and ODFW December 3, 2009, guidance is limited to these three sites. A 785-foot buffer in suitable habitat was applied around Site #25. The buffer around Site #25 is clipped to wheat fields, as shown in the new Figure Q-2c.

Comment P7-2

Explain the “pie-shaped” buffer around #13. It appears that no facility components would have to be moved even if a 785-foot buffer surrounded the entire #13 location.

Response to P7-2

The “pie-shaped” buffer around #13 resulted from limitation of the buffer to suitable habitat (Figure P-8 in Exhibit P). As explained in the response to P7-1, the 785-foot buffer was mistakenly applied around WGS Site #13 in the ASC. This site is a single burrow, and the corrected buffer is shown in a new Figure Q-2c provided in Attachment P-3 [CONFIDENTIAL].

Comment P7-3

Explain why WGS Site #25 was not listed in Table Q-2.

Response to P7-3

Site #25 was not listed in Table Q-2 because it was identified as part of the Leaning Juniper II surveys. It is described in Table 12 of Attachment 7 to the LJII *Request for Amendment* (June 2009). Table Q-2 has been revised to include this location (see Attachment P-4). Site #25 is the WGS site directly to the east of the G string referenced in ODFW's comment letter (see response to Comment ODFW RAC3 in the section titled Reviewing Agency Comments from Oregon Department of Fish and Wildlife).

The ODFW comment letter also asked about WGS Site #12 between the FF and GG strings. The proposed improved road running through the Category 1 habitat associated with Site 12 is Tree Lane, which is a Gilliam County road. If any improvements are needed to this road, they would be made entirely within the County road right-of-way and in compliance with the County Road Use Agreement. The turbine string access road from Tree Lane to the GG turbine string would be constructed entirely outside the 785-foot buffer, as shown in the new Figure Q-2c provided in Attachment P-3 [CONFIDENTIAL].

Comment P7-4

For sites #5, #8, #13 and #25, provide the year (or years) of the surveys in which the detections were made.

Response to P7-4

Sites #5 and #8 were detected in 2008 and sites #13 and #25 were identified in 2009.

Comment P7-5

For sites #5, #8, #13 and #25, describe the habitat types of the areas within 785 feet of the sites and the suitability of these areas for WGS foraging or burrow establishment.

Response to P7-5

The habitat types of the land within 785 feet of the WGS sites are described in Figure P-8 and Figure Q-2c (Attachment P-3 [CONFIDENTIAL]), and in Table Q-2 (Attachment P-4).

Comment P7-6

For sites #5, #8, #13 and #25, what would be the consequences to proposed facility components if the current ODFW guidance were applied?

Response to P7-6

The consequence of applying a 785-foot buffer around these sites or other single burrows that may be identified during the 2010 preconstruction surveys is that there is less room to microsite and design the turbines, roads, and collector lines.

Comment P8

Provide more detail regarding the use of “the latest turbine designs and micro-siting wind turbines to avoid areas of high bird use.” How have turbine designs changed to reduce avian fatalities? What areas of high bird use would be avoided?

Response to P8

As described on page P-65 of the ASC, wind turbine design has changed significantly since the first large wind facilities, such as those in the Altamont Pass Wind Resources Area, were developed. Turbines typically are installed on tubular steel towers instead of lattice towers, without open platforms at the top of the tower, substantially reducing perching and nesting opportunities for raptors and other birds.

Turbines are now much larger, and blades move at lower revolutions per minute (rpm). Presumably the blades are more visible to raptors than blades on the older, smaller turbines. For example, the blades of the 1.5-MW turbines installed at Klondike I, II, and III projects turn at approximately 20 rpm, compared to more than 60 rpm for the Kenetech 56-100 downwind turbine, the most common turbine at Altamont Pass. Blade tip speeds are similar for both new-generation and old-generation wind turbines. Although the relationship between blade tip speed and mortality is unknown, it is presumed that rpm is a factor in avian mortality, because avian ability to distinguish blade speed and blade position decreases as rpm increases.

Further discussion of avian studies and turbine design can be found on page P-65 of the ASC.

Specific micro-siting measures to avoid areas of high bird use and minimize the risk of collision mortality to individual birds at the Facility will include minimizing turbine placement in high-value native habitats such as grassland, shrub-steppe, and riparian areas. In addition, during final Facility design, the Facility will be micro-sited to avoid impacts to Category 1 habitat, and to avoid and minimize both temporary and permanent impacts to high-quality native habitat where practicable. Before construction, IBR will contract Northwest Wildlife Consultants, Inc. (NWC) to participate in the turbine micro-siting in order to identify whether any micro-siting should occur in saddles or other areas of potentially higher avian use.

Comment P9

The application states that IBR will implement a WMMP, a Revegetation Plan, and a Habitat Mitigation Plan. Provide drafts of the proposed WMMP, Revegetation Plan and Habitat Mitigation Plan, based on the comparable plans for Leaning Juniper II (*Final Order on Amendment #1*, November 20, 2009). Make edits of the LJII plans that are appropriate for Montague, and submit the drafts showing the tracked changes.

Response to P9

Drafts of the proposed Wildlife Monitoring and Mitigation Plan, Revegetation Plan, and Habitat Mitigation Plan have been provided to the Department. IBR based the drafts on the

comparable plans for Leaning Juniper II (*Final Order on Amendment #1*, November 20, 2009) and has edited the plans as appropriate for Montague. Edits are tracked.

Comment P10

What measures will be taken to “be prepared for a quick response to wildfires”?

Response to P10

IBR will implement fire safety measures consistent with Conditions 60 through 65 in the *First Amended Site Certificate for the Leaning Juniper II Wind Power Facility* (November 20, 2009). For example, during construction and operation of the Facility, IBR will ensure that the operations and maintenance facility and all service vehicles are equipped with shovels and portable fire extinguishers of a 4A5OBC or equivalent rating. In addition, during Facility construction and operation, IBR will develop and implement fire safety plans in consultation with the North Gilliam County Rural Fire Protection District and the Arlington Fire Department to minimize the risk of fire and to respond appropriately to any fires that occur on the facility site. In developing the fire safety plans, IBR will take into account the dry nature of the region and should address risks on a seasonal basis. IBR will meet annually with District and Fire Department personnel to discuss emergency planning and plans to invite District and Fire Department personnel to observe any emergency drill or tower rescue training conducted at the Facility.

Comment P11 (from IBR)

IBR recently received an update to the report titled *Avian and Bat Cumulative Impacts Associated with Wind Energy Development in the Columbia Plateau Ecoregion of Eastern Washington and Oregon* provided in Attachment P-8 of the ASC. The report was prepared by WEST, Inc., for Klickitat County Planning Department, Washington, and was updated in February 2010. The updated report is included in Attachment P-5.

Reviewing Agency Comments from Oregon Department of Fish and Wildlife (Responses dated March 29, 2010)

Comment ODFW RAC1

Surveys for sensitive species are not complete. The Application states that the remaining biological surveys for raptor nests, avian point counts, and Washington ground squirrels will take place in the spring of 2010. However, without this data ODFW is unable to effectively comment on potential wildlife concerns and required mitigation measures.

Response

Please see responses to RAIs P-1 through P-6 above.

Comment ODFW RAC2

On page P-21 of the Application the Applicant outlines the definition of Category 1 Washington ground squirrel habitat. The Department understands that the Applicant does not agree with the Category one guidance outlined in our letter to ODOE on 12-3-09.

However, it is unclear in the Application if the protection measures outlined by ODFW are being used to protect WGS on the project area.

ODFW would recommend that the Applicant follows the guidance in our letter to ODOE on 12-3-09.

Response

Please see response to RAI P-7.

Comment ODFW RAC3

Figure P-3 shows a WGS site directly to the east of the G string near the boundary of the project however Figure P-8b does not show an associated Category 1 buffer around that site. The Department needs to have clarification one why this site does not have any associated protection measures.

Response

Please see response to RAI P-7.

Comment ODFW RAC4

Figure P-8c shows a WGS colony between the FF and GG strings and a proposed improved road running through the Category 1 habitat associated with this colony. ODFW understands that this improved road is Tree Lane and is a Gilliam County road. However, it is unclear what proposed improvements would be made to the road as part of this Application.

Response

Please see response to RAI P-7.

Comment ODFW RAC5

The Wildlife and Habitat Mitigation plan is mentioned several times but was not included with the Application for Site Certificate documents. The Application included mitigation through project site selection that has occurred so far.

Mitigation plans must specifically describe the actions which will be taken to mitigate the impacts of the proposed project on fish and wildlife species and habitat identified in the biological surveys. The proposed mitigation must be consistent with the Oregon Habitat Mitigation Policy. The Department looks forward to working with the Applicant on the mitigation plan and is comfortable that a Condition in the Certificate similar to the draft Condition 89 as written in the Application would allow the Applicant and ODFW to work cooperatively to create a plan that would meet the Mitigation Policy. However, until completed, ODFW cannot effectively determine if it meets the Oregon Mitigation Policy.

Response

The draft wildlife mitigation and monitoring plan and habitat mitigation plan are provided. [Note: To avoid confusion with subsequent revised versions of both plans, the RAC5 versions are not included in this Supplement.]

Comment ODFW RAC6

The revegetation plan is not included in the Application and will need to be completed before the application is considered complete. The plan should list plant species which will be used, the timing of revegetation, and methods for conserving topsoil for revegetation.

Response

The draft revegetation plan is provided in Attachment P-6.

Comment ODFW RAC7

The Application for a Site Certificate does not include a post-construction monitoring plan for the Facility. The Application outlines a draft Condition 87 that will be incorporated in the Final Order requiring the completion of the plan. ODFW would recommend that the plan would include monitoring known Washington ground squirrel sites adjacent to site facilities.

Response

A post-construction monitoring plan is provided in ASC Attachment 7 (Wildlife Monitoring and Mitigation Plan). [Note: To avoid confusion with the later revised version of this plan, included in the Supplement as Attachment P-6, the RAC7 version is not attached.]

Reviewing Agency Comments from U.S. Fish and Wildlife Service (Responses dated March 29, 2010)

Comment USFWS RAC1

Avian and Bat Protection Plan. The Service recognizes the contribution made by Iberdrola Renewables (Iberdrola) in the development and adoption the 2008 Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines (Guidelines). To further minimize impacts to bats, eagles, and other avian species, Iberdrola in partnership with the Service completed an Avian and Bat Protection Plan (ABPP) (dated October 10, 2008) to be applied across its corporate wind energy program. These efforts indicate a commitment to promoting development of clean energy production, with its associated environmental benefits, while limiting the adverse environmental effects that can be associated with wind energy production.

The Service recommends that the ABPP be updated to include finalized new regulations and implementation guidance regarding limited take of bald and golden eagles under the BGEPA. The new program makes available two new types of permits that will be used to improve the management of bald and golden eagles, protect public safety, and manage activities or projects that may disturb or otherwise incidentally “take” bald or golden eagles or their nests, while maintaining stable or increasing populations. Until we have additional data to show that golden eagle populations can withstand additional take, of those permits authorized under the new rule, we will only consider permits for safety emergencies, programmatic permits, and any other permits that will result in a reduction of ongoing take or a net take of zero. The Final rule and the Final Environmental Assessment can be found online at: <http://www.fws.gov/migratorybirds/>.

Proper siting and placement of infrastructure known to be lethal or injurious to eagles is essential to avoid take. Measures including siting to avoid disturbance take and lethal take need to take into greater considerations life-history components such as dispersal, migration, winter concentration behavior, and foraging behavior during breeding and non-breeding seasons. Project turbine siting and associated construction should be designed to avoid take to eagles. Take may only be authorized where it is consistent with the goal of stable or increasing breeding populations and when the take cannot practicably be avoided.

Response

IBR's Avian and Bat Protection Plan (ABPP) currently references the USFWS permit program development bald and golden eagles under the Bald and Golden Eagle Protection Act. IBR plans to update its ABPP to include both the Wind Turbine Guidelines Federal Advisory Committee Recommendations and new regulations regarding limited take of bald and golden eagles. Jerry Roppe, IBR's Wind Operations Wildlife Permitting Compliance Manager, is coordinating with the USFWS national and regional offices on these updates.

As described in Exhibit BB of the ASC, IBR will identify raptor nests, including eagle nests, within the proximity of transmission line poles or other Facility components. Nests will be avoided. IBR will not engage in high-impact construction activities (activities that involve blasting, grading, or other major ground disturbance) or allow high levels of construction traffic within 1,300 feet of these nest sites during the nesting season.

Comment USFWS RAC2

During the NOI phase of the Project, the Service made recommendations that the final Project design (towers, electrical lines, other Project features) incorporate the micro-siting considerations and recommendations outlined in the Guidelines, as well as information developed during the Project's "pre-project assessment" surveys and "macro-siting" exercises (USFWS 2009). While Iberdrola has committed to consider micro-siting options to incorporate the Service's recommendations (Iberdrola 2010), the Service is concerned that the ASC does not reflect complete "macro-siting" and "pre-project assessment" efforts, and recommendations provided in the Guidelines. The application for a site certificate should include: 1) habitat mapping and species surveys including Washington ground squirrel surveys, raptor nest surveys, and avian point counts consistent with the Pre-Project Assessment phase of the Guidelines; 2) an assessment of project impacts; and 3) a habitat mitigation proposal, including a calculation of habitat mitigation acreages.

Response

1. Habitat mapping and species surveys results are provided in Exhibits P and Q. Detailed information about the Facility area is provided in the ASC. Some biological data are site-specific and were used by IBR to design the layout several months prior to submittal of the ASC. IBR is committed to implementing measures (such as the 785-foot buffer from WGS colonies) to avoid, minimize, and mitigate potential impacts. The WGS surveys will be conducted in the proper season and in accordance with the Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines, before construction. The extensive 2010 survey data will also be used for further facility micro-siting. The 2010 survey year is closer to construction than 2008 and the data more "fresh."

2. An assessment of project impacts is provided in Exhibits P and Q and in the proposed habitat mitigation plan (HMP). [Note: To avoid confusion with the later revised version of this plan, included in the Supplement as Attachment P-6, the RAC2 version is not attached.]
3. The HMP, including a calculation of habitat mitigation acreages, is provided in RAI Attachment 7. [Note: To avoid confusion with the later revised version of this plan, included in the Supplement as Attachment P-6, the RAC2 version is not attached.]

Comment USFWS RAC3

During the NOI phase of the Project, the Service made recommendations for the amount and type of mitigation necessary for temporary and permanent impacts to wildlife habitat, significant displacement of wildlife populations, and other wildlife impacts that result from the proposed Project (USFWS 2009). Iberdrola has since committed to working with ODFW and the Service on mitigation options to incorporate these recommendations (Iberdrola 2010). We look forward to working with ODOE, Iberdrola, ODFW and other interested parties to develop adequate mitigation measures for impacts from the Project once the above referenced surveys are completed.

Response

The proposed HMP is provided in RAI Attachment 7. [Note: To avoid confusion with the later revised version of this plan, included in the Supplement as Attachment P-6, the RAC3 version is not included.]

Comment USFWS RAC4

During the NOI phase of the Project, the Service made recommendations to strategically assess and offset direct and cumulative impacts to birds and bats (USFWS 2009). In response, Iberdrola provided the report titled "Avian and Bat Cumulative Impacts Associated with Wind Energy Development in the Columbia Plateau Ecoregion of Eastern Washington and Oregon" prepared by WEST, Inc. (2008). This assessment notes that as wind energy development continues to expand, ferruginous hawks (*Buteo regalis*) collision mortality could eventually reach a point that populations may begin to decline without some form of mitigation. Ferruginous hawk, Swainson's hawk, Washington ground squirrel, and burrowing owl are already rare or exhibiting population and distribution declines. Failure to understand the cumulative impacts of this rapid wind project development expansion could contribute to population level impacts to species. Therefore, the Service continues to recommend that ODOE take the lead in initiating the cumulative impacts recommendations in the Guidelines.

Response

Noted.

Email of March 17, 2010: Revised Draft Habitat Mitigation Plan

From Sara Parsons/IBR to John White/ODOE on March 17, 2010, following e-mail of March 11, 2010, documenting conference call with Oregon Department of Fish and Wildlife:

During our call, you had a question about one of the sentences in Section IV. We've tried to clarify that sentence in the attached version of the HMP. [See Attachment P-6 for HMP.]

Within the 440-acre parcel, 252 acres have recently been protected by conservation easements in association with other wind energy projects including the Leaning Juniper II Wind Power Facility; the certificate holder has an option for establishing a conservation easement on the remaining 188 acres.

Email of March 24, 2010: Final Revised Draft of Figure Q-2c [confidential figure provided under separate cover in Attachment P-3]

From: Parsons, Sara McMahon
Sent: Wednesday, March 24, 2010 4:49 PM
To: 'Steve Cherry'; 'John White'
Cc: 'Kara Warner'; 'kronner@NW-WildlifeConsultants.com'
Subject: RE: Montague - conference call with ODFW

We've revised the Figure Q-2c [confidential; provided under separate cover] we sent on Thu 3/11/2010 3:46 PM to show that the turbine string access road from Tree Lane to the GG turbine string would be constructed entirely outside the 785-foot buffer. Also, we had mistakenly applied the 785-foot buffer around WGS Site #13 in the ASC. This site is a single burrow like WGS Site #5 and #8. Any inconsistency between our map and application and ODFW December 3, 2009, guidance is limited to sites #5, #8 and #13. We will provide this map and clarifications in the response to RAIs, which we plan to send to John on Friday.

Emails of March 31 and April 2, 2010: Revised Draft Wildlife Mitigation and Monitoring Plan

From Sara Parsons/IBR to John White/ODOE:

Karen and I have reviewed the HMP and Reveg Plans and do not have any comments or concerns with those changes.

We also reviewed the WMMP changes, which look good as well. Karen brought up three points on the WMMP that I missed and did not include in the original WMMP we submitted to you and Steve. I think they are important enough that I wanted to bring them up.

- Number of days carcass remain. (Pg A-7, line 38 and A-8, lines 20-21). We think it should be 35 days, not 40, consistent with the rest of the plan and Helix' WMMP.

- Mitigation (Pg A-10, lines 15-16). We suggest adding habitat mitigation. IBR often secures larger-than-required habitat mitigation sites that protect wildlife habitat and benefit species that are found to be impacted during fatality monitoring.
- Raptor Nest Monitoring (Pg A-11, line 42). We would like to discuss changing 2-miles to ½ mile. The nests on lands not leased by the Project owner are challenging to monitor. Almost all of the adjacent landowners are signed up with other projects. Also, the Analysis section (Pg A-13, line 21) specifies 1/2 mile, so the benefit of surveying out to two miles is unclear.

I also received your e-mail about WGS and will be reviewing that with our team.

From Sara Parsons to John White on April 2, 2010:

Here's the WMMP with Karen's suggested changes to the raptor nest survey language she discussed with Steve. I also put in the other changes we discussed. Everything is highlighted in green. [See Attachment P-6.]

Email of April 20, 2010: Habitat Standard

Comment

On March 31, the Department sent an email to IBR outlining the policies for determining the location of Category 1 WGS habitat based on comments from ODFW. IBR has not commented on the March 31 email, and so we do not know whether IBR accepts this approach. We propose to develop a recommended site certificate condition that would incorporate the policies discussed in that email. The boundaries of Category 1 WGS habitat would be determined based on where the squirrels are active in the most recent squirrel season prior to the start of construction. This includes a 785-foot buffer around any active single-burrow WGS detections in that survey; however, single-burrow detections from previous years that are not active in the latest survey would not be considered Category 1.

Response

As we discussed on April 14 [by phone], your e-mail made sense to us. However, we would like to review the draft condition to make sure it is consistent with our understanding of the approach.

Scenic and Aesthetic Values

RAI No. 1 (Responses dated March 29, 2010)

Comment R1

Were applicable State-level management plans omitted from Table R-1?

Response to R1

The identification of State-level management is not specified under OAR 345-021-0010(1)(r)(A). However, even if it were specified under OAR 345-021-0010(1)(r)(A), IBR's visual consultant, CH2M HILL, determined that no applicable State-level plans cover lands within the analysis area. For these reasons, Table R-1 contains only the local and federal plans that address lands within the analysis area.

Comment R2

The application states that the Roosevelt Community Subarea Plan contains two statements about visual resources. What do these statements say? Provide excerpts from the Plan showing the context of these statements.

Response to R2

The Roosevelt Community Subarea Plan includes two general statements about visual qualities in the plan area. The two statements do not define specific scenic resources or views. Excerpts from the Plan showing the context of these statements are provided below.

The first statement, located in the Conclusions subsection on page 9 of the Background and Inventory Report section, is a general statement about the natural features found in the subarea. The statement is as follows: "1. The natural features of the area: the hillsides, the long shoreline, the wet areas, the green alluvial plain, the broad spacious bench covered with grasses, and the irregular terrain covered with thick and thin soils over bedrock create an interesting and pleasing setting for people living in the area."

The second statement, located in the Residential subsection on page 11 of the Existing Land Use section, addresses Columbia River views from the platted residential lots in North Roosevelt and West Roosevelt. No specific views are identified. The statement is as follows: "In a more intensely used area this would be an inefficient use of land; however, in Roosevelt this is a positive land use pattern. These lots are used for gardens and storage sheds. They provide a pleasant open feeling with views of the river and a quiet setting."

Again, no specific scenic resources or views are identified.

Comment R3

Fourmile Canyon is identified as a “high-potential site.” The location of the Fourmile Canyon BLM interpretive site is such that visitors are directed to a view of wagon ruts lying in a generally west or northwest direction from Fourmile Canyon Road. The ZVI analysis indicates that as many as 30 MWPF turbines could be visible from that location. In order to help the Council decide whether the visibility of turbines (even though at a distance) would have a significant adverse impact on the visual experience of the site, can IBR provide visual simulations of the turbines that would be visible from the interpretive site (using both 1.5-MW and 3.0-MW layouts)? The photograph in Attachment R-1 showing the view from the Fourmile site could be used as the basis for the simulation.

Response to R3

Attachment R-1 contains visual simulations of the turbines that would be visible from the Fourmile Canyon BLM interpretive site, using both the 1.5-MW and 3.0-MW layouts. The photograph showing the view from the Fourmile site was used as the basis for the simulations. One of the visual simulations in Attachment R-1 is of the approved Shepherds Flat turbines currently under construction. The Shepherds Flat turbines would be visible from the Fourmile Canyon BLM interpretive site, looking south, which demonstrates that there are other turbines visible from the “high-potential site.”

Comment R4

IBR proposes to implement “best management practices” to minimize visual impacts of the facility. What are the best management practices that will IBR employ to reduce visual impacts? Do best management practices include maintenance of turbine towers (for example, periodic cleaning of turbine towers to remove oil or other fluid drips that may leak from nacelles)?

Response to R4

The best management practices referenced in the ASC Exhibit R Conclusion section (Section R.9) are presented in the Opportunity for Mitigation section (Section R.6), consistent with OAR 345-021-0010(1)(r)(D). IBR will incorporate a combination of these best management practices to minimize the proposed Facility’s visual effects. The best management practices listed in Sections R.6 and R.9 related to visual effects do not include maintenance of the turbines such as cleaning of turbine towers to remove oil or other fluid drips. However, IBR will follow good housekeeping best management practices to maintain the Facility, including periodic cleaning of turbine towers to remove oil or other fluid drips that may leak from nacelles. Any cleaning will be consistent with measures described in Condition 84 of the *First Amended Site Certificate for the Leaning Juniper II Wind Power Facility* (November 20, 2009). IBR will ensure that there is no runoff of washwater from the site or discharges to surface waters, storm sewers, or dry wells. No acids, bases, or metal brighteners will be used with the washwater. Biodegradable, phosphate-free cleaners will be used sparingly.

Reviewing Agency Comments from Oregon Parks and Recreation Department

Comment RAC1

Upon review of the Scenic Resources (Exhibit R) section, we find that three OPRD properties were not included. We request that Arlington; John Day, Hildebrand; and Cottonwood Canyon State Park be included in the visual impact evaluation for this project.

Response

None of the three state parks currently has a management plan. According to OPRD (in a telephone communication between Jan Houck of OPRD and CH2M HILL on March 9, 2010), a master plan for Cottonwood Canyon State Park will be developed in summer 2010. Under OAR 345-021-0010(1)(r), the only scenic resources that are analyzed for purposes of Exhibit R are resources identified as significant or important in local land use plans, tribal land management plans, and federal land management plans. These three parks are not included in any local, tribal, or federal plan, and even if the parks were listed in a state-level management plan, the three parks would not be evaluated in Exhibit R since state-level management plans are not specified in OAR 345-021-0010(1)(r).

However, the Arlington and John Day (Hildebrand) parks are evaluated under Exhibit T, as indicated in the response to RAI2 below, to demonstrate that the Facility will have no negative impact on these recreational resources.

Email of March 24, 2010: Nighttime Lighting

From: Parsons, Sara McMahon
Sent: Wednesday, March 24, 2010 11:12 AM
To: White, John
Subject: RE: LJII - nighttime lighting

Our construction site manager, Jay Anderson, has informed us of the need for nighttime lighting during construction of LJII. Night-time lighting will be needed to maintain the construction schedule during shorter winter days. The construction contractors will need to erect turbines at both LJIIA and LJIIB with a night crew. They should be able to erect at least 1 turbine per night with 1 crew. Based on the current construction schedule, they would need to use a night crew starting in early to mid September through the end of November, for a maximum of three months. The crews will need to work all night from 7 pm to 7 am.

To assist with the night time crew and other construction needs, Dennis Barker will serve as our second on-site construction site manger. Per condition 34, Dennis' contact information is as follows: Dennis.Barker@iberdrolausa.com, Telephone: (307) 321-7696.

We reviewed the compliance matrix and site certificate conditions with Jay Anderson, Dennis Barker and the construction contractors during the environmental training for the project. Jay, Dennis and the construction staff are aware of the requirements of the Conditions including, 92 and 93, and will ensure that any nighttime lighting used will be the minimum necessary for construction and will take measures to direct the light to illuminate only the work area. Lighting will only be used at the work location and only directed downward to illuminate the work area at the turbine base or upward from the base to

illuminate the turbine tower; construction lighting will not be directed outward. One of our on-site environmental compliance officers, Jay Anderson or Dennis Barker, will monitor the use of lighting during construction to ensure these requirements are being met.

From: White, John [mailto:john.white@odoe.state.or.us]
Sent: Wednesday, March 24, 2010 8:30 AM
To: Parsons, Sara McMahon
Subject: LJII - nighttime lighting

Would you please send me an email confirming what you have told me by telephone regarding the need for nighttime lighting during construction of LJII. Please describe the types of construction operations that will need lighting, the approximate hours of night (all night, or how many hours after sunset or before dawn?), the duration (months) during which this would occur, and the reasons why nighttime construction work is necessary. Make sure that your construction contractors are aware of the requirements of Condition 92: any nighttime lighting must be the minimum necessary for construction, care must be taken to direct the light to illuminate only the work area, and the lights must be shielded or downward directed to reduce glare. Your on-site environmental compliance officer (Condition 34) should monitor the use of lighting during construction to ensure these requirements are being met.

Email Response of April 13, 2010: Recreation Standard

Comment

In response to RAI R3, IBR provided photo-simulations of the view from the BLM Oregon Trail interpretive wayside on Fourmile Road. For viewers looking west from the BLM wayside, parts of five proposed MWPF turbines would be visible behind the view of the ONHT ruts, as shown by the simulations.

The Council has previously found that the identified "important scenic value" value associated with the ONHT at the Fourmile Road site is the view of the visible remnants of the trail and the immediate surroundings on public land (*Final Order on Amendment #1 for the Leaning Juniper II Wind Power Facility*, p. 52). The Council, however, has not previously considered a wind energy facility in which proposed turbines would be located behind the view of the ONHT ruts. It is possible that the Council could make a finding under the Scenic Standard that the "important scenic value" of the Fourmile site extends to the horizon beyond the "immediate surroundings" of the visible ONHT ruts. Aside from the question of a scenic resource, however, we believe that the visibility of wind turbines located behind the view of the ONHT ruts would adversely affect the recreational opportunity of the site.

We believe that the ONHT interpretive site on Fourmile Road is an "important recreational opportunity" under the factors set out in the Recreation Standard. The Fourmile wayside location is designated as a "high-potential site" for public viewing and interpretation of the ONHT. The recreational opportunity is unusual because of the historic significance of the ONHT. Although opportunities to view developed areas of presumed ONHT trail alignments are common, opportunities to view visible remnants of the trail in locations

accessible to the public are rare and irreplaceable. Demand due to interest in the ONHT may be considered moderate.

Under the current MWPF layouts, wind turbines would be plainly visible on the horizon within the same line-of-sight or viewing angle from the perspective of viewers looking toward the visible remnants of the ONHT from the BLM interpretive site. We believe that these turbines would draw the viewers' attention away from the ONHT ruts, would interfere with the viewers' experience and enjoyment of the historic significance of the ONHT and would degrade the recreational value of the site.

IBR provided a photo-simulation showing that Shepherds Flat (South) wind turbines (already approved by the Council but not yet built) would be visible to viewers looking south from the BLM wayside. We will give the certificate holder an opportunity to confirm the accuracy of the photo-simulation. We assume that the Shepherds Flat South turbines would be visible, but they would not be located in the same direction as the ONHT ruts and would not occupy the background behind the view of the ruts from the interpretive site.

The Department compared the photo-simulation of the MWPF turbines with the proposed facility layouts (Figures C-5c and revised Figure C-7a) to determine which turbines are visible in the photo-simulations. It appears to us that the turbines shown in the photo-simulation of the 1.5-MW turbines are turbines in the V-string. We note that met tower PM3 is adjacent to this string, and we would be concerned about it being visible from the Fourmile site as well. We are uncertain what turbines are shown in the photo-simulation of the 3.0-MW turbines. Parts of five turbines are shown in the simulation, but there are only three turbines in the V-string shown in the 3.0-MW layout (revised Figure C-7a). Met tower PM3 is also part of the 3.0-MW layout.

To mitigate the potential adverse impact of the MWPF on the recreational value of the Fourmile ONHT interpretive site and to support a recommendation of compliance with the Recreation Standard, we believe that the site certificate should be subject to a condition requiring the certificate holder to microsite the MWPF components so that no turbine or met tower would be visible to viewers looking toward the ONHT ruts from the Fourmile interpretive site.

Response

There was an error in the photo-simulation of the 3.0-MW turbines. The 3.0-MW simulation mistakenly used the 1.5-MW maximum turbine layout with five turbines. However, the simulation did use the 3.0-MW turbine tip height. It would not be possible to microsite the MWPF components so that no turbine or met tower would be visible to viewers looking toward the ONHT ruts from the Fourmile interpretive site. The MWPF components would have to be shifted 2,300 to 3,000 feet to the west, which would result in them being placed on the side hill and in the valley. Due to the low wind resource in this low-lying area, the turbines would have to be dropped from the layout entirely, resulting in a loss of up to 9 MW. Further, moving these turbines does not eliminate from a viewer's perception other wind turbines in the vicinity of MWPF. While not directly behind the trail ruts, turbines from an adjacent project would be within the panoramic view from the Fourmile interpretive site.

It is IBR's position that the recreational value of the Fourmile ONHT interpretive site is not diminished by the presence of wind turbines in the viewscape, any more than it is diminished by other post-19th century human activity in the area including barns, farmhouses, silos, agricultural equipment, and commercial activity such as the Cecil General Store and Highway 74. However, IBR is willing to enhance the interpretive site as part of its overall construction activities and commitment to the community, similar to Condition 52 of the Klondike 3 Site Certificate. A condition similar to the following is proposed:

To offset any perceived adverse visual effects to the setting of the Oregon Trail alignment, the certificate holder shall enhance the existing Fourmile ONHT interpretive site or other Oregon Trail historical marker near the MWPF with an additional educational and interpretive display in coordination with the Oregon Trails Advisory Council.

Email Response of April 20, 2010: Scenic Resource Standard

Comment

In response to RAI R1, IBR stated "the identification of State-level management areas is not specified by OAR 345-021-0010(1)(r)(A)." IBR made a similar statement in response to RAI RAC2. These statements are incorrect. The language of OAR 345-021-0010(1)(r)(A) is based on the Scenic Resources Standard. The standard addresses "...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." In this context, we have always interpreted "local management plans" to include State-level plans applicable to State-managed lands in the local area and not just management plans of local governments. "Local" here is used in a generic sense to mean any applicable management plan that is neither a tribal nor a federal management plan. Previous Council orders have routinely addressed State-level plans (see, for example, *Final Order on the Application for the Leaning Juniper II Wind Power Facility*, pp. 60-61, discussing State management of the John Day State Scenic Waterway).

Portions of the John Day State Scenic Waterway lie within the scenic resources analysis area for MWPF, as shown on Figure R-1. We propose to make the same recommended findings for MWPF as were made for Leaning Juniper II with regard to the John Day State Scenic Waterway.

Response

IBR concurs with ODOE's proposal to make similar findings for MWPF as were made for Leaning Juniper II with regard to the John Day State Scenic Waterway. The nearest MWPF turbine would be approximately five miles away from the segments of the John Day River that have been designated as Federal Wild and Scenic River and State Scenic Waterway. The ZVI maps show that the MWPF turbines would not be visible from viewpoints on the river. Portions of the John Day Wildlife Refuge are approximately 5 miles from the nearest MWPF turbine. The refuge is protected for wildlife habitat and is not managed for scenic views. Based on the ZVI maps, some MWPF turbines might be visible from a small and relatively inaccessible area within the wildlife refuge approximately 1/4-mile from the river bank.

Cultural Resources

RAI No. 1 (Responses dated March 29, 2010)

Comment S1

Does IBR propose to “avoid” all of the sites listed in the application Section S.3.2 (pp. 3-8), regardless of NRHP eligibility status? Does “avoid” mean establishing a 50-foot buffer, as stated in proposed Condition 48 on p. 13? We will need to confirm with SHPO whether a 50-foot buffer is acceptable (SHPO requested a 30-meter buffer at Klondike).

Response to S1

That is correct. No facilities will be constructed within recorded archaeological sites regardless of NRHP eligibility status. Additional protection measures will also be implemented as described in the proposed condition shown below, which is similar to Condition 48 in the *First Amended Site Certificate for the Leaning Juniper II Wind Power Facility* (November 20, 2009):

Before beginning construction, the certificate holder shall label all identified historic, cultural, or archaeological resource sites on construction maps and drawings as “no entry” areas. If construction activities occur within 200 feet of an identified site, the certificate holder shall flag a 30-meter buffer around the site. The buffer will not extend into the County road right-of-way. No buffers will be required at operational farmsteads DS-1, JRC-8, and JRC-10. Existing private and public roads may be used without upgrades or widening within the 30-meter buffer around identified archaeological sites.

Comment S2

S-12 says that “archaeological monitors” will be present during construction in areas within 200 feet of the six cultural sites that have been identified as likely to be eligible for listing on the NRHP. The proposed conditions (taken from the LJII site certificate) do not address this. In a new condition, how should the qualifications of an “archaeological monitor” be described?

Response to S2

The statement in Exhibit S that archaeological monitors will be present was made in error. As proposed in the condition above (see response to S1), if construction activities occur within 200 feet of an identified site, a 30-meter buffer will be maintained. The buffer will provide adequate protection for the resource, thereby eliminating the need for an archaeological monitor.

Comment S3

Discuss the potential placement of facility components on or near sites that have been identified as “likely to be eligible for listing on the NRHP.”

Turbine KK2 on Fig C-5c appears to be located on CH-09-05.

There appear to be road improvements sited on or near CH-09-07.

There appears to be a new turbine road (Fig C-5a) sited on or near CH-09-RM-2.

Turbines S8 and V5 on Fig C-5a (and turbine S5 on Fig C-7a) appear to be sited on CH-09-21-OR.Tr.

Response to S3

The facilities specified in the comment appear to be overlapping with stated sites because of the scale of the figures. No facilities will be constructed within recorded archaeological sites regardless of NRHP eligibility status. The site boundaries will be further protected with a buffer as described in the proposed condition above (see response to S1).

Project facilities will be routed around sites CH-09-05, CH-09-07, and CH-09-RM-2. The boundaries of these sites will be protected with a 30-meter buffer. Each site will be marked in the field with high-visibility stakes or pin flags and posted with a “no entry” sign, as described in the proposed condition.

The Oregon Trail location shown in Figure 3 is approximate. No Facility components will be located on CH-09-21-OR.Tr. The locations of the intact segments of the Trail as recorded during the cultural resources investigation are shown in new (confidential) Figures 3a and 3b in the revised *Cultural Resources Survey for the Montague Wind Power Facility* (see confidential Attachment S-1). Elsewhere within the site boundary, visible remnants of the Trail have been destroyed by road construction and agricultural cultivation. CH-09-21-OR.Tr will be avoided by all Facility construction and operation. The Trail will be marked in the field with high-visibility stakes or pin flags and posted with a “no entry” sign, consistent with a site certificate condition similar to Condition 103 in the *First Amended Site Certificate for the Leaning Juniper II Wind Power Facility* (November 20, 2009):

In reference to the approximate alignment of the Oregon Trail described in the ASC, the certificate holder shall comply with the following requirements:

- a) The certificate holder shall not locate facility components on visible remnants of the Oregon Trail and shall avoid any construction disturbance on those remnants.*
- b) The certificate holder shall not locate facility components on undeveloped land where the trail alignment is marked by existing Oregon-California trail Associated markers, as described in the ASC.*
- c) Before beginning construction of the Montague components as described in the ASC, the certificate holder shall provide to the State Historic Preservation Office (SHPO) and the Department photographic documentation of the presumed Oregon Trail alignments within the site boundary.*

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

Reviewing Agency Comments from State Historic Preservation Office and Confederated Tribes of the Umatilla Indian Reservation

Please refer to Attachment S-2 for comments and responses.

Email Response of April 20, 2010: Cultural Resources Standard

Comment

The Historic, Cultural and Archaeological Resources Standard is not applicable to site certificate eligibility under ORS 469.501(4), but the Council may impose site certificate conditions based on the requirements of the standard. We anticipate that we will recommend site certificate conditions for the MWPF similar to those previously adopted by the Council for the protection of cultural resources. IBR has provided revised information about cultural resources in response to comments from SHPO (RAC4) and CTUIR (RAC6). We will take into consideration any further comments we receive from SHPO or CTUIR in making our recommendations for site certificate conditions.

We have been advised by SHPO that additional cultural resource information may be required in connection with the USACE's Section 404 permit (March 26, 2010, email from SHPO is being forwarded to IBR with this memo). IBR discusses the Section 404 permit in Exhibit J of the application. SHPO notes that under Section 106 of the National Historic Preservation Act, USACE is obligated to take into account, prior to the project activity, any effect that the activity may have on historic properties, including historic structures, districts, archaeological sites, and Traditional Cultural Properties. USACE and SHPO will have to agree upon the project's area of potential effect (APE), which includes areas that would be directly and indirectly affected by the project activity. This may include areas outside of the proposed MWPF site boundary and outside the study area addressed in the cultural resource report submitted by IBR.

The applicant is obligated to document (for USACE) all historic properties within the APE, regardless of whether they believe there will be an effect. We believe that the federal process under Section 106 of the NHPA (identifying historic properties, determining eligibility for listing in the NRHP, additional field studies if necessary, consultation, and seeking

Response

IBR understands the issues raised in this comment and is working with the U.S. Army Corps of Engineers and the State Historic Preservation Office. IBR will keep the Oregon Department of Energy informed regarding the issues raised by USACE and SHPO.

Email Response of April 20, 2010: Cultural Resources Sites and Isolates

Comment

In Exhibit S, the findings are described as: "23 sites, including 19 archaeological sites, three farmsteads, and two visually intact remnants of the ONHT comprising a single site. In addition, the Applicant recorded 22 archaeological isolates." In Section S.3.2, twenty-three sites are listed.

In the cultural survey report, the findings are described as 24 sites and 20 isolates (pages 5-2 and 5-9).

Response

At the request of SHPO, two isolates (IF-21 and IF-JRC-5) were changed to sites.

Comment

Table 5-1 in the report lists 24 sites, but does not include "CH-09-06", which is one of the sites listed in Exhibit S, Section S.3.2. Also, there are two sites listed in the report that are not included in the list of 23 sites in the Exhibit ("IF-21" and "IF-JRC-5").

Response

At the request of SHPO, "CH-09-06" was deleted from the site record. IF-21 and IF-JRC-5 were formerly isolates, converted to sites.

Comment

Table 5-2 lists 20 isolates. The exhibit text says there are 22 isolates, but does not list them. I want to put the correct number of isolates in the draft proposed order.

Response

The correct number of isolates goes from 22 to 20, as a result of IF-21 and IF-JRC-5 being converted to sites.

Email of April 21, 2010: Response to SHPO Letter on Ranch Structures

Please refer to Attachment S-2.

Email of April 21, 2010: Response to SHPO Request for Table of Site Protection Measures

Please refer to Attachment S-1.

Recreation

RAI No. 1 (Responses dated March 29, 2010)

Reviewing Agency Comment from Oregon Parks and Recreation Department

Comment RAC2

Two OPRD properties were not included in the Recreation Facilities (Exhibit T) section. These properties are Arlington and John Day (Hildebrand). We request that those properties be identified and evaluated.

We have attached a map showing the OPRD properties colored orange. (See Attachment T-1.)

Response

A revised Figure T-1 showing the Arlington State Park and John Day (Hildebrand) State Park is attached to this response table. (See Attachment T-1.)

The following information regarding these two parks was provided to CH2M HILL in a personal communication with Jan Houck, ORPD, on March 9, 2010:

Arlington State Park. This park is a wayside that is an open space along the highway (I-84) intended to provide a visual buffer area for travelers to stop and take photos of the surrounding landscape. The wayside is undeveloped and there are no amenities or structures. There is no management plan for this park or wayside.

John Day (Hildebrand) State Park. This is an undeveloped property along the John Day River Scenic Waterway that is for boating access only. It is open to the public but is only accessible by the river (otherwise landlocked by private property). Only river users can access it. There is no management plan for this park.

While each of these parks provides recreational opportunities such as boating access and day use, the recreational opportunities are common and replaceable. As determined by EFSC for the previously approved Leaning Juniper II Wind Power and Shepherds Flat projects regarding other parks within the analysis area that provide similar recreational opportunities, these recreational opportunities do not meet the criteria set forth in OAR 345-022-0100 as "important." Therefore, further evaluation of Arlington State Park and John Day (Hildebrand) State Park in Exhibit T is not necessary to demonstrate that the Facility will have no significant adverse impacts on any important recreational opportunity within the analysis area.

Nonetheless, these two parks were included in a revised ZVI analysis and it was determined that the Facility turbines would not be visible from either park. A revised Figure R-1 is attached to this response table (see Attachment T-1). Thus, even though analysis of these

two parks was not required under Exhibit R (by rule), and even though further evaluation was is not required as a part of Exhibit T (because these parks are not “important” within the meaning of EFSC), the information provided in these responses demonstrates that the Facility will have no significant adverse impacts on any important recreational opportunity within the analysis area, including Arlington State Park and John Day (Hildebrand) State Park.

Public Services/Socioeconomic Impacts

RAI No. 1 (Responses dated March 29, 2010)

Comment U1

The application states that some local and County roadways may require improvement before construction can begin. Figures C-5a through C-5d show “proposed improved roads,” some of which lie outside the site boundary. Are all proposed improvements to local and County roadways restricted to the roads shown on these figures and marked as “proposed improved roads?”

Confirm whether all improvements to County roads would be restricted to areas within the County rights-of-way, would be subject to approval by the County and would conform to County road design standards.

Discuss the potential for listed or special-status plant species to be affected by the proposed improvements to local and county roadways.

Will any improvements or modifications to State roads or highways be needed?

Response to U1

Yes, the proposed improvements to local and County roadways are shown in ASC Figures C-5a through C-5d as “proposed improved roads.”

Improvements to County roads will be restricted to areas within the County rights-of-way and therefore will be subject to approval by the County and conformance with County road design standards. County roads, including the unimproved right-of-ways, are zoned and designated for road purposes. Therefore, consistent with ODFW’s approach for WGS, no additional survey work is required within the right-of-way for listed or special-status plant species.

Modifications to State roads or highways may also be needed. For example, modifications may be needed at the intersection of Highway 19 with Tree Lane, Weatherford Lane, Montague Road, new access road south of Tree Lane, and on a private road to the proposed O&M building, as shown in revised Figure U-2 in Attachment U-1. Any modifications would be entirely within the County and State rights-of-way. IBR will contact the Oregon Department of Transportation (ODOT) to schedule a site visit to review approaches onto Highway 19 and will confirm the necessary permits. Permits needed for this project relevant to the approaches for Highway 19 are anticipated to be the same as those required for the nearby Pebble Springs and Leaning Juniper II projects:

- Permit to Construct a State Highway Approach
- Permit to Operate, Maintain, and Use a State Highway Approach

Written confirmation from ODOT will be provided to ODOE as soon as it is available.

Comment U2

What was considered a “commutable distance” in the analysis of housing availability?

Response to U2

A commutable distance in the analysis of housing availability was assumed to be approximately 50 miles. This number was based on the distance from the Facility to the main public service providers (such as, for example, the cities of The Dalles and Goldendale).

Comment U3

The letter from Gilliam County Fire Services states that the North Gilliam County RFPD is not equipped to provide confined space or high angle rescue services. If these types of rescue are needed at the site, how would they be provided?

Response to U3

IBR recognizes that the local fire authority does not have the proper training or capability to perform high-angle rescue. As included in the site certificate application for Leaning Juniper II, at the beginning of Facility operation, the IBR will provide to the North Gilliam County Rural Fire Protection District and the Arlington Fire Department copies of the approved site plan indicating the identification number assigned to each turbine and the location of all Facility structures. During operation of the Facility, IBR will provide to the North Gilliam County Rural Fire Protection District and the Arlington Fire Department the names and telephone numbers of Facility personnel available to respond on a 24-hour basis in case of an emergency on the Facility site.

During Facility construction, IBR's construction contractors will utilize personnel that are trained and equipped for tower rescue and are first aid and CPR certified. In the event of an accident or medical emergency, these personnel will perform the rescue of personnel to the ground.

During Facility operation, IBR's operations personnel will be trained and equipped to perform tower rescue for tower-related emergencies. Operations personnel will be first aid and CPR certified. First aid kits will be taken up each tower during maintenance procedures and will be available to crew personnel during troubleshooting activities. In the event of an accident or medical emergency, these personnel will perform the rescue of personnel to the ground.

Once the Facility is operational, IBR intends to hold an annual meeting with North Gilliam County Rural Fire Protection District and the Arlington Fire Department to discuss emergency planning. If IBR conducts an annual emergency drill or performs tower rescue training at the Facility, the North Gilliam County Rural Fire Protection District and the Arlington Fire Department will be invited to observe.

Follow-up Comment (Informal RAI)

IBR proposes to provide the North Gilliam County Rural Fire Protection District with the final site plan and 24-hour emergency contact numbers. Given that the proposed facility borders Morrow County, contact the Ione Rural Fire District and find out if they want to have the same information.

IBR Response

On March 11, 2010, CH2M HILL contacted Virgil Morgan (Fire Chief of the Ione Rural Fire District), on behalf of Iberdrola Renewables, Inc. (IBR). Mr. Morgan indicated that his district collaborates with the North Gilliam County Rural Fire Protection District on a regular basis, and he would appreciate being sent the same information.

Mr. Morgan's contact information is as follows:

Fire Chief Virgil Morgan
P.O. Box 322
Ione, OR 97843
Telephone 541.422.7504
Cellular: 541.256.0256

Comment U4

Proposed Condition 36 addresses possible road damage to Gilliam County roads. Page U-4, however, discusses the use of Fairview Road as an alternate route for construction vehicles. Shouldn't the condition apply to Morrow County as well?

Response to U4

Yes, Condition 36 should apply to both Gilliam and Morrow counties if Morrow County roads are used during construction. The suggested revised language is as follows:

The certificate holder shall cooperate with the Gilliam County Road Department and Morrow County Road Department (if Morrow County roads are used), to ensure that any unusual damage or wear to County roads that is caused by construction of the Facility is repaired by the certificate holder. Upon completion of construction, the certificate holder shall restore county roads to preconstruction condition or better, to the satisfaction of the County Road Departments.

Comment U5

Proposed Condition 38 needs clarification. What does the phrase "except while in use" mean in reference to "parked or stored" equipment or machinery? Does this exception apply to County roads outside the site boundary?

We acknowledge that this condition language exists in the LJII site certificate, and we think that clarification would be helpful for both Montague and LJII.

Response to U5

The suggested revised Condition 38 language is as follows:

The certificate holder shall ensure that no equipment or machinery is parked or stored on any county road within and outside of the site boundary. The certificate holder may temporarily park equipment off the road but within the County right-of-way as long as such temporary parking practices are coordinated with the County Roadmaster.

Waste Minimization

Email of February 4, 2010: Soil Extension Service Letters

From: Parsons, Sara McMahon
Sent: Thursday, February 04, 2010 3:55 PM
To: 'John White'
Subject: Montague - Letter from OSU

When we originally began scoping the permitting of Montague, CH2M Hill requested updates from the OSU extension offices for both Morrow and Gilliam counties. We received the two attached letters in response to that request. (See Attachment V-1.)

Sandy McNabb (on behalf of OSU-extension service Sherman County) says that the project is outside his normal work area, but because the project is on dryland wheat, he could provide some general comments.

Jordan Maley, the OSU extension agent from the Gilliam county OSU-extension office also provided a letter, which is more specific and applicable to the project considering that the project is now located entirely within Gilliam county. Given that Maley's letter is more specific to dryland cropping in Gilliam county, we view it as essentially replacing the Macnab comment letter, although we appreciate Sandy taking the time to provide comments and will continue to work with him in the future for any of our projects within in his geographic area.

RAI No. 1 (Response dated March 29, 2010)

Comment V1

The application discusses a *variance* under OAR 340-093-0080(1) or a *permit exemption* under OAR 340-093-0080(2). Explain whether IBR is asking for a variance (and provide support for the request explaining why a variance should be granted) or, alternatively, a permit exemption. If IBR is asking for a permit exemption, provide, if possible, concurrence from DEQ that the proposed disposal of waste concrete on site would be exempt from the permit (email confirmation is acceptable).

Note that this same issue came up in the Helix application and was addressed by RAI#1 Request G-1. IBR's response at that time (after consultation with DEQ) was that neither a variance nor an exemption would be requested.

Response to V1

No variance or exemption will be requested or required for the Facility, consistent with the approach employed for the Helix Wind Power Facility (which, as ODOE notes, is described

in IBR's response to Request G-1 in RAI #1). This language in the Montague ASC was an error.

Facility Retirement and Restoration

Informal RAI (Response dated March 12, 2010)

Comment

Explain the difference between the acreage of temporarily disturbed areas listed in Table W-1 (1821 total acres) and the acreage (2070 total acres) in Table C-3.

Response

The total disturbed acreage in Table C-3 (2070 acres) differs from the disturbance listed in Table W-1 because the temporary disturbance from the underground collector system was not included in the decommissioning calculation shown in Table W-1. The underground collection system will not be removed, and is therefore not accounted for in the decommissioning cost estimate.

RAI No. 1 (Responses dated March 29, 2010)

Comment W1

How many gallons of oil and antifreeze are contained in each turbine (maximum amount for the range of turbine types that could be used at Montague)?

Response to W1

The maximum amount of oil contained in the turbines proposed at the Montague Facility ranges from 83 to 304 gallons. These oils are located in the gearboxes, braking systems, and control systems, with the majority being located in the gear box. Gear box oil is analyzed frequently to determine its quality and continuing utility. Oil is replaced when tests reveal that it is necessary. With improved filtration technology, oil can be used for up to five years before being replaced. Historic frequency indicates that oil is typically changed every three years and hydraulic fluids are changed every two years.

The maximum amount of antifreeze contained in the turbines proposed at the Montague Facility ranges from 3.6 to 6 gallons.

Comment to W2

What is the maximum length and number of wires (per tower) connecting the pad-mounted transformer to the tower?

Response to W2

The maximum length and number of wires would be 20 feet and 26 wires per tower. This number includes power cable, ground wires, and fiber optic cable running from the control panel inside the base of the turbine tower to the generator step up transformer adjacent to tower. The lateral distance between the pad-mounted transformer and the tower would be approximately 5 feet, as shown in Figure B-3.

Comment W3

The application requests two major departures from the way the Council has addressed financial assurance: a “phase-in” of the requirement (starting in year 15 of operation) and an offset for scrap or salvage value in the calculation of the financial assurance amount. The phase-in would probably require a change in the Council’s rules and a scrap offset has previously been rejected by the Council. Confirm for the record whether IBR wants to pursue either of these issues for Montague.

Response to W3

IBR understands the Council has previously indicated that no credit for scrap or salvage value be considered in determining the appropriate site restoration cost under OAR 345-022-0050. IBR has decided not to pursue either of these issues within the Montague ASC. IBR does, however, reserve the right to petition the Energy Facility Siting Council, outside of the Montague application process, for a policy or rule change that would better align the decommissioning security requirements imposed on wind projects with their real value.

Noise

Email of March 10, 2010: Confidential Noise Submission

From: Albrich, Elaine [mailto:ERALBRICH@stoel.com]
Sent: Wednesday, March 10, 2010 11:14 AM
To: Tom Stoops
Cc: John White; Parsons, Sara McMahon; Carrie.Konkol@ch2m.com; Filippi, David; Albrich, Elaine; Mark.Bastasch@CH2M.com
Subject: PROTECTED NOISE DATA SUBMISSION: Iberdrola, Montague Wind Power Facility

Please find attached Iberdrola's submission of protected noise data for the Montague Wind Power Facility. A hard copy will follow by mail. (See Attachment X-1.)

Elaine R. Albrich

STOEL RIVES LLP | 900 SW Fifth Ave, Suite 2600 | Portland, OR 97204-1268

RAI No. 1 (Responses dated March 29, 2010)

Comment X1

X-3 discusses the fact that the facility would be located on private land under "long-term wind energy leases." We believe a condition similar to Condition 102 in the Helix site certificate should be included in the Montague site certificate. This would require a complaint response system during operation. We believe that the Council can require the certificate holder to monitor and record noise levels (see OAR 340-035-0035(4)(a)). A complaint system would be undermined if the wind lease agreements with the landowners contain language that would inhibit the landowners from raising complaints about facility noise. Do the lease agreements contain such language?

Response to X1

IBR is agreeable to a condition similar to Condition 102 in the Site Certificate for Helix, dated July 31, 2009.

There is no language in IBR's underlying wind leases that would prevent IBR from ensuring that the Facility complies with DEQ noise regulations, including the ability to address complaints from landowners that the Facility exceeds maximum DEQ noise levels.

Comment X2

Provide the manufacturers' sound power level reports for the two turbines included in the noise analyses.

Response to X2

Attachment X-1 (CONFIDENTIAL) contains sound power level test reports for the GE 1.5-MW and Vestas 3.0-MW turbines.

While the 3.0-MW Vestas turbine is not currently in production, its noise level represents the loudest turbine that would be considered for this Facility.

Comment X3

Provide a spreadsheet showing the sound pressure level contributed by all turbines included in the prediction of overall sound pressure level at each noise sensitive receptor along with the amount of ground attenuation and atmospheric absorption included in the prediction of sound from each turbine.

Response to X3

Attachment X-1 contains confidential spreadsheets showing the per turbine sound pressure levels at each receptor for the 1.5- and 3.0-MW layouts.

Ground attenuation and atmospheric absorption were calculated in accordance with the methods previously requested by the Department. The ISO 9613-2 Simple Ground Method provides for a maximum attenuation of 4.8 dBA per equation 10 of the standard. Table X3-1 provides predicted ground attenuation sound levels (dBA) at various distances for the two hub heights.

TABLE X3-1 Predicted Ground Attenuation Quantities for Facility Turbines		
	Ground Attenuation (dBA)	
Distance (ft)	80-meter Hub Height	50-meter Hub Height
984	0.0	0.0
1640	2.0	1.3
3281	3.4	3.1
4921	3.9	3.7
6562	4.1	3.9
9843	4.3	4.2

Similarly, ISO 9613-1 (and -2) define atmospheric absorption for the requested temperature (10°C) and humidity (70 percent), conditions that favor propagation. Table X3-2 provides predicted atmospheric absorption frequencies (Hz) at various distances for the two hub heights.

TABLE X3-2 Predicted Atmospheric Absorption for Facility Turbines								
Octave Band Center Frequency (Hz)								
	63	125	250	500	1000	2000	4000	8000
Distance (ft)								
984	0.03	0.12	0.3	0.57	1.11	2.91	9.84	35.1
1640	0.05	0.2	0.5	0.95	1.85	4.85	16.4	58.5
3281	0.1	0.4	1	1.9	3.7	9.7	32.8	117
4921	0.15	0.6	1.5	2.85	5.55	14.55	49.2	175.5
6562	0.2	0.8	2	3.8	7.4	19.4	65.6	234
9843	0.3	1.2	3	5.7	11.1	29.1	98.4	351

Other Information

RAI No. 1 (Responses dated March 29, 2010)

Reviewing Agency Comments from Public Utilities Commission

Comment RAC1

Applicant in constructing the subject facility will become an “operator” of electrical supply lines (i.e., power lines) and is subject to the Oregon PUC’s (OPUC’s) safety rules in Chapter 860, Division 024 of the Oregon Administrative Rules (OAR). Per OAR 860-024-0010, every operator shall construct, operate, and maintain electrical supply and communication lines in compliance with the standards prescribed National Electrical Safety Code (NESC).

Applicant should also note responsibilities covered in OAR 860-024-0000, 860-024-0001, 860-024-0005, 860-024-0007, 860-024-0010, 860-024-0011, 860-024-0012, 860-024-0015, 860-024-0016. Refer to ORS 757.035 for OPUC statutory authority.

Response

IBR recognizes that the Oregon Public Utility Commission (OPUC) defines IBR as an operator for purposes of OPUC’s safety standards set forth in OAR chapter 860, division 024. However, IBR is not an operator or a utility for the purposes of the Federal Energy Regulatory Commission (FERC) or the North American Electric Reliability Corporation (NERC).

Comment RAC2

Before project design and construction, brief the OPUC Safety Reliability Security Staff as to how it will comply with OAR Chapter 860, Division 024 during design, construction, operation, and maintenance and on an ongoing basis.

Response

Before Facility construction, IBR will coordinate with OPUC to ensure that transmission line designs and specifications are consistent with applicable codes and standards, consistent with the Leaning Juniper II SC condition 79.

Comment RAC3

When the project is put into service, brief the OPUC Safety Reliability Security Staff as to how operator of the project it will comply with OAR Chapter 860, Division 024 on an ongoing basis considering future operations, maintenance, emergency response, and alterations until project retirement. As part of the briefing, provide OPUC Safety Reliability Security Staff with the following:

Name of qualified person, including contact information, who will be responsible for the operation, maintenance, and safety of the electrical supply system (e.g. power lines) on an

ongoing basis. This person will serve as OPUC Safety Reliability Staff's contact who will give permission for applicable Staff inspections, audits, and other liaison.

Response

IBR will provide the Department with the emergency contact information for the Facility, the name of the qualified person overseeing the Facility's ongoing operation, and a copy of the final Facility layout as required by Conditions 2 and 34.

Comment RAC4

Name of the person and organization, including contact information, responsible for receiving emergency notifications and responding to imminent conditions per OAR 860-024-0012(1).

Response

IBR will provide the Department with the emergency contact information for the Facility, the name of the qualified person overseeing the Facility's ongoing operation, and a copy of the final Facility layout as required by Conditions 2 and 34.

Comment RAC5

Map of the final routes and installation of electrical supply lines showing:

- Transmission lines and structures (over 50,000 Volts)
- Distribution lines and structures – differentiating underground and overhead lines (over 600 Volts to 50,000 Volts)
- Substations, roads, and highways

Response

IBR will provide the Department with the emergency contact information for the Facility, the name of the qualified person overseeing the Facility's ongoing operation, and a copy of the final Facility layout as required by Conditions 2 and 34.

Comment RAC6

Provide plan and profile drawings of the transmission lines.

Response

IBR will provide the Department with the emergency contact information for the Facility, the name of the qualified person overseeing the Facility's ongoing operation, and a copy of the final Facility layout as required by Conditions 2 and 34.

Email Responses of April 20, 2010: Magnetic Field Strength

Comment 2a

2a. Table AA-2 and Table AA-3 give the calculated magnetic field strengths for the 230-kV lines (Central to Slatt and West sub to Central sub). In [ASC] Attachment AA-2, IBR has provided the data output for the EMF modeling. The data sets "230CBPAM" and "230CBPAH" appear to relate to Table AA-2, and the remaining two data sets appear to relate to Table AA-3. In Table AA2, for example, a magnetic field of 126.9 mG at centerline is shown for the monopole configuration. In [ASC] Attachment AA-2, the 230BPAM data for magnetic field shows 126.86 for the "Major Axis (mG)" at centerline. Assuming that this figure that was rounded up to 126.9 for Table AA-2, can you explain why the "Major Axis" value is used, rather than the "RMS Resultant (mG)" – which is 137.36 at centerline according to the 230BPAM data?

Response

This was an error. The maximum field strength should be the RMS resultant (mG) which is 137.36 or rounding off 137.4 mG. This is the vector sum of the field strengths in each of the three axes (x, y, and z) where the 126.9 mG is the highest field strength within one of these three axes. The correct number is 137.4 mG, the resultant vector sum.

Comment 2b

2b. Also, I note that the greatest magnetic field strength according to the 230BPAM data is not at centerline, but instead at +5 feet.

Response

The monopole design has two phase conductors on one side of the pole and one conductor on the other. The magnetic field is offset slightly to the side of the monopole structure where the two phase conductors are located.

Other Information

RAI No. 1 (Response dated March 29, 2010)

Comment BB1

In what ways has IBR “adjusted the locations of facility components to reduce the potential visual impacts to the ONHT?”

Response to BB1

IBR avoided placing facilities on intact segments of the trail as discussed in Exhibit S of the ASC. Below is a summary of specific layout adjustments that were made to avoid impacts to cultural resources, including reducing the potential visual impacts to the ONHT. Refer to the new confidential Figures 3a and 3b in Attachment S-1 for an illustration of these facilities in relation to the archaeological sites and intact segments of the Trail.

- Turbine S8 was shifted to the west
- Turbine C7 was shifted to the west
- A turbine between LL6 and LL5 was moved

Collectors, roads, and or staging areas around these turbines were also shifted to avoid impacts:

- Between V4 and V6
- Between S7 and S8
- Between WW2 and XX2
- Around turbine C7
- Between LL5-LL6
- Around L1 to M2
- Between KK1 and KK2
- Between E6 and E7 east
- Road to X string
- Roads between TT1, KK1, and the HH1 string