

EXHIBIT Q**THREATENED AND ENDANGERED PLANT AND ANIMAL SPECIES**

OAR 345-021-0010(1)(q) and OAR 345-022-0070

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Attachment

Q-1 Preliminary Rare Plant Evaluation for the Montague Wind Power Facility

Q.1 INTRODUCTION

Iberdrola Renewables, Inc. (Applicant) proposes to construct the Montague Wind Power Facility (Facility) in Gilliam County, Oregon, with generating capacity of up to 404 megawatts (MW). Up to 269 turbines will be located at the Facility site, depending on the final turbine size and vendor (as further described in Exhibit B, Section B.1.3). This Exhibit provides information under OAR 345-021-0010(1)(q) to demonstrate that the threatened and endangered species standard in OAR 345-022-0070 can be satisfied. OAR 345-022-0070 requires the following:

“[T]he Council, after consultation with appropriate state agencies, must find that:

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

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

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

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

As discussed in more detail below, Exhibit Q contains evidence upon which the Council can make the required findings under OAR 345-022-0070 and conclude that the Facility will not likely cause a significant reduction in the likelihood of survival or recovery of specified plant and wildlife species within the analysis area (which includes the area within the Facility site boundary and the area within 5 miles of the site boundary (see Figure Q-1¹ Project Order, Section VI.

In short, for plants, one population of the Oregon state threatened Laurent’s milk-vetch (*Astragalus collinus* var. *laurentii*) was identified within the Facility site boundary during surveys conducted for LJIB (Figure Q-3). In addition, two populations of the Oregon candidate plant species, sessile mousetail, were identified within the Facility site boundary during surveys conducted for Pebble Springs (PPM, 2006) (Figure Q-3). Based on habitats present within the site boundary, the Oregon candidate species, dwarf evening primrose, may also occur. There is no plant protection and conservation

¹ As discussed in Exhibit C, the Applicant requests that the Site Certificate authorize a micrositing corridor. Turbines will be placed within a defined corridor rather than at specific points in order to retain flexibility to microsite turbines at the optimal locations for wind capture, impact avoidance, and geotechnical conditions at the Facility site. Because micrositing corridors, for ease of description and depiction, are generally regularly shaped polygons, certain micrositing corridors overlap with patches of Category 1 habitat. However, the Applicant will site all permanent facilities outside such Category 1 habitat when finalizing the layout. No permanent facilities will be located within Category 1 habitat.

program applicable to the site. Therefore, OAR 345-022-0070(1)(a) does not apply, and the Council may make the finding required by OAR 345-022-0070(1)(b).

For wildlife species, extensive information reviews revealed that listed wildlife species are not likely to occur at, or be affected by, the Facility, except for the state endangered and federal candidate Washington ground squirrel (WGS), which was observed within the Facility site boundary. However, as described below and in Exhibit P, the Facility will not cause a significant reduction in the likelihood of WGS survival or recovery, as the Applicant has designed the Facility to avoid Category 1 habitat.²

Therefore, based on the information presented in this Exhibit, the Council may find that the Facility will not cause a significant reduction in the likelihood of any threatened or endangered plant or wildlife species' survival or recovery, and OAR 345-022-0070(1) and (2) are satisfied.

Q.2 THREATENED AND ENDANGERED SPECIES THAT MAY BE AFFECTED

OAR 345-021-0010(1)(q) *Information about threatened and endangered plant and animal species that may be affected by the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0070. The applicant shall include:*

OAR 345-021-0010(1)(q)(A) *Based on appropriate literature and field study, identification of all threatened or endangered species listed under ORS 496.172(2), ORS 564.105(2) or 16 USC § 1533 that may be affected by the proposed facility;*

Q.2.1 Summary Table of Threatened and Endangered Species

Response: Species data were obtained from the U.S. Fish and Wildlife Service (USFWS) County lists for Gilliam and Morrow, Oregon and Klickitat, Washington and from the Oregon Natural Heritage Information Center (ORNHIC) database query (see Exhibit P, Attachment P-6). Based on these data, 47 state and federal threatened, endangered, and candidate species were identified as potentially occurring within the Facility site boundary and a 5-mile buffer area. Of these, 18 species are only listed or candidates in Washington State and are not listed federally or in the state of Oregon. These species, as well as other state sensitive species and federal species of concern (non-listed special-status species) are addressed in Exhibit P. State and federal threatened, endangered and candidate species are discussed in Exhibit Q.

Table Q-1 provides a summary of the threatened, endangered, and candidate plant and wildlife species with known or potential occurrence within the analysis area, and the corresponding impact potential. The only federal or Oregon State-listed or candidate species with known records within 5 miles of the Facility are Laurent's milk-vetch, sessile mousetail, and WGS.

² Section P.4.1 in Exhibit P explains how the Applicant classified Category 1 habitat within the Facility site boundary.

Table Q-1. State and Federal Listed and Candidate Species with Potential Occurrence within 5 miles of the Site Boundary

Species	Federal Status ¹	Oregon Status ¹	Washington Status ¹	Occurrence	Impact Potential ²
Plants					
Ute-Ladie's-tresses <i>Spiranthes diluvialis</i>	LT	--	LE	No	No
Northern Wormwood <i>Artemisia borealis</i> ssp. <i>wormskioldi</i>	C	LE	LE	No	No
Laurent's milk-vetch <i>Astragalus collinus</i> var. <i>laurentii</i>	--	LT	--	Yes	Yes
Sessile Mousetail <i>Myosurus sessilis</i>	--	C	--	Yes	Yes
Dwarf Evening Primrose <i>Camissonia pygmaea</i>	SoC	C	SS	No	No
Clustered Lady's-slipper <i>Cypripedium fasciculatum</i>	SoC	C	SS	No	No
Suksdorf's Desert-Parsley <i>Lomatium suksdorfii</i>	Soc	C	SS	No	No
White Meconella <i>Meconella oregana</i>	SoC	C	T	No	No
Disappearing Monkeyflower <i>Mimulus evanescens</i>	SoC	C	--	No	No
Liverwort Monkey-flower <i>Mimulus jungermanioides</i>	SoC	C	EX	No	No
Barrett's Beardtongue <i>Penstemon barrettiae</i>	SoC	C	T	No	No
Obscure Buttercup <i>Ranunculus reconditus</i> (= <i>triternatus</i>)	SoC	E	E	No	No
Persistent Sepal Yellowcress <i>Rorippa columbiae</i>	SoC	C	E	No	No
Pale Blue-eyed Grass <i>Sisyrinchium sarmentosum</i>	SoC	C	T	No	No
Mammals					
Gray Wolf <i>Canis lupus</i>	LE	LE	LE	No	No
Fisher <i>Martes pennanti</i>	C	--	LE	No	No
Washington Ground squirrel <i>Spermophilus washingtoni</i>	C	LE	C	Yes	Yes
Birds					
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	D	LT	SS	No	No
Northern Spotted Owl <i>Strix occidentalis caurina</i>	LT	LT	LE	No	No
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	C	--	C	No	No

Table Q-1. State and Federal Listed and Candidate Species with Potential Occurrence within 5 miles of the Site Boundary

Species	Federal Status ¹	Oregon Status ¹	Washington Status ¹	Occurrence	Impact Potential ²
Amphibians and Reptiles					
Oregon Spotted Frog <i>Rana pretiosa</i>	C	--	LE	No	No
Fish					
Steelhead – Mid-Columbia River ESU, summer run <i>Oncorhynchus mykiss</i>	LT	SV	SC	No	No
Steelhead – Upper Columbia River ESU	LE	--	SC	No	No
Steelhead – Snake River Basin ESU	LT	--	SC	No	No
Sockeye Salmon – Salmon River Tributary to the Snake River <i>Oncorhynchus nerka</i>	LE	--	SC	No	No
Chinook Salmon – Snake River ESU, spring/summer and fall runs <i>Oncorhynchus tshawytscha</i>	LT	LT	SC	No	No
Chinook Salmon – Upper Columbia River ESU <i>Oncorhynchus tshawytscha</i>	LE	--	SC	No	No
Bull trout <i>Salvelinus confluentus</i>	LT	--	SC	No	No
Invertebrates					
Mardon Skipper <i>Polites mardon</i>	C	--	LE	No	No

¹ **State and Federal Status Definitions**

LE Listed Endangered. Taxa listed by the USFWS or National Marine Fisheries Service (NMFS) as Endangered under the Endangered Species Act (ESA), or by the Departments of Agriculture (ODA) and Fish and Wildlife (ODFW) of the state of Oregon under the Oregon Endangered Species Act of 1987 (OESA). Endangered taxa are those which are in danger of becoming extinct within the foreseeable future throughout all or a significant portion of their range.

LT Listed Threatened. Taxa listed by the above agencies as Threatened; defined as those taxa likely to become endangered within the foreseeable future.

PE Proposed Endangered. Taxa proposed by the above agencies to be listed as endangered.

PT Proposed Threatened. Taxa proposed by the above agencies to be listed as threatened.

C Candidate. Candidate taxa for which NMFS or USFWS have sufficient information to support a proposal to list under the ESA, or which is a candidate for listing by the ODA under the OESA.

D Delisted. Removed from the federal list of endangered species.

SS State Sensitive. Any wildlife species native to the state of Washington that is vulnerable or declining and is likely to become endangered or threatened throughout a significant portion of its range within the state without cooperative management or removal of threats

SC State Sensitive-Critical. Species for which listing is pending, or those for which listing may be appropriate if immediate conservation activities are not taken. Also considered critical are some peripheral species which are at risk throughout their range, and some disjunct populations.

Sources: ORNHIC, 2009; USFWS, 2009a, 2009b, 2009c

Q.2.2 Methodology Used to Identify Threatened and Endangered Species

Response: Methods used to identify state and federal threatened and endangered species are described in sections Q.2.2.1 (Literature Review) and Q.2.2.2 (Field Surveys). Section Q.2.2.3 summarizes the methods.

Q.2.2.1 Literature Review

General

Species data were obtained from USFWS for Gilliam, Morrow, and Klickitat county lists and from the ORNHIC database query for state and federal listed and candidate species, as well as state sensitive species and federal species of concern (non-listed special-status species) within the analysis area.

Based on results of the USFWS county lists and the ORNHIC database query, as well as input from biologists knowledgeable in the Facility area, 47 state and federal threatened, endangered and candidate species were identified as potentially occurring within the analysis area. Of these, 18 species are only state listed or candidates in Washington State and are not listed federally or in the state of Oregon, and are therefore discussed in Exhibit P. The only federal or Oregon-state listed or candidate species with known records within 5 miles of the Facility are Laurent's milk-vetch, sessile mousetail, and WGS.

The Applicant reviewed the list of species obtained from the USFWS and ORNHIC and assessed the potential for these species to occur based on suitable habitat, professional experience, and consultation with the Oregon Department of Fish and Wildlife (ODFW).

There are no Oregon Department of Agriculture (ODA) plant protection and conservation programs that apply to the Facility or within the site boundary, nor are wildlife conservation programs in place.

Plants

The USFWS and ORNHIC were queried for information on listed and sensitive plant species in Gilliam, Morrow, and Klickitat counties documented within 5 miles of the site boundary.

To supplement the information provided by the above sources, the following sources were consulted:

- Rare and Endangered Plants of Oregon (Eastman, 1990)
- Flora of the Pacific Northwest (Hitchcock and Cronquist, 1973)
- Threatened and Endangered Vascular Plants of Oregon: an Illustrated Guide (Meinke, 1982)
- A Field Guide to Pacific States Wildflowers: Washington, Oregon, California, and Adjacent Areas (Niehaus and Ripper, 1976)

- Rare, Threatened and Endangered Plants and Animals of Oregon (ORNHIC, 2007)
- Interactive Plant Keys and Color Photos for Oregon (Oregon Flora Project, n.d.)

These sources provided additional information on rare plant species that potentially occur in the analysis area and included critical information such as habitat preferences, morphological characteristics, phonologic development timelines, and species ranges.

State and federal listed, candidate, and proposed special-status plant species potentially occurring within and near the site boundary were identified based on the results of the ORNHIC and USFWS responses, and are listed in Table Q-1 along with the potential for project impacts. Species that are not state or federal listed, candidate, or proposed are discussed in Exhibit P, as are species that are Washington State-listed, but lacking federal or Oregon State listed or candidate status. Habitat preferences were derived from the literature and the specialists' regional knowledge and experience for each species.

Wildlife

The USFWS and ORNHIC were queried for information on listed and sensitive wildlife species in Gilliam, Morrow, and Klickitat counties documented within 5 miles of the site boundary. The responses are listed in Table Q-1 along with the survey results.

Over the past several years, NWC has contacted ODFW for information on wildlife habitat requirements and distribution within and in the site boundary. In addition, the following technical reports were reviewed for relevant biological resource information as part of the baseline study or following completion of the baseline study:

- Current Status of Washington Ground Squirrels in Oregon and Washington (Betts, 1999)
- Status and Habitat Use of the Washington Ground Squirrel (*Spermophilus washingtoni*) on State of Oregon Lands, South Boeing, Oregon, in 1999 (Morgan and Nugent, 1999)
- Dispersal Patterns of Washington Ground Squirrels in Oregon (Klein, 2005)
- Home Range, Movement, and Foraging Behavior of Adult Washington Ground Squirrels (Delevan, 2005)
- Biological Enhancement Study for the Columbia Ridge Landfill and Recycling Center (Waste Management, 1990)
- Survey of Peregrine Falcon Breeding Areas in Oregon during 2003–2007: Final Report (Isaacs, 2008)
- Results of Bald Eagle Nest Monitoring (Isaacs and Anthony, 2007)

In addition, data collected by local wildlife biologists for the general area was reviewed.

State and federal listed, candidate, and proposed special-status wildlife species potentially occurring within and near the site boundary were identified based on the results of the ORNHIC and USFWS responses, and are listed in Table Q-1 along with the potential for project impacts. Species that are not state or federal listed, candidate, or proposed are discussed in Exhibit P, as are species that are Washington State-listed, but lacking federal or Oregon State listed or candidate status. In addition, existing literature and scientific data were reviewed.

Q.2.2.2 Field Surveys

Plants

Rare plant habitat requirements were derived from the literature for each species and the biologists' long-term experience in the general area as well as within the analysis area, as described in Section Q.2.2.1.

Special-status plant surveys were conducted by Northwest Wildlife Consultants (NWC) in areas of the Facility site boundary that overlap with Pebble Springs in spring 2006 (PPM, 2006) and with LJIIB in spring 2009 (NWC, 2009a). The survey methods were similar to those conducted for other wind-energy facilities in the area.

In 2009, the Applicant contracted CH2M HILL to design and conduct a botanical field investigation for the proposed Facility for threatened, endangered, and rare plant species, as described in Attachment Q-1. Based on a preliminary review of existing habitat conditions and the results of the literature review, potentially suitable habitat is present for dwarf evening primrose, as well as the two special-status species that have already been identified within the site boundary: Laurent's milk-vetch and sessile mousetail. CH2M HILL conducted a habitat assessment for state and federal listed plants within portions of the site boundary accessible by roads between October 12 and December 4, 2009 (Attachment Q-1). Biologists will conduct focused botanical surveys in the spring of 2010 to identify additional state or federally listed species located near proposed Facility components. Preliminary survey corridors for the planned botanical surveys are shown in Figure P-2. CH2M HILL will provide a written report of the field investigation to the Department to detail any identified state and federal listed or candidate plant species.

If any state or federally listed plant species are identified during the supplemental field investigation, the Applicant will ensure that construction and operation of the Facility will have no impact on individuals or populations. The Applicant will instruct all construction personnel to avoid these areas and shall implement other appropriate measures to protect the resources. Section Q.4 provides further details on avoidance measures.

Wildlife

Wildlife habitat requirements were derived from the literature for each species and the biologists' long-term experience in the general area as well as within the analysis area, as described in Section Q.2.2.1.

Surveys for state and federal listed and candidate wildlife species were conducted for portions within the Facility site boundary by NWC at Pebble Springs in spring 2006 (PPM, 2006) and at LJIIB in spring 2009 (NWC, 2009a). Survey methods were the same as those described in Attachment P-7 to Exhibit P (NWC, 2009b).

In 2008, the Applicant enlisted the expertise of NWC to design and conduct habitat and wildlife field investigations for the proposed Facility (Exhibit P, Attachment P-7). Suitable habitat for federal and state listed wildlife within the site boundary was evaluated by conducting habitat mapping of broad level habitat types. Special-status species surveys, focused primarily on WGS, were conducted in March 2008 in a portion of the site boundary (see Section 3.2.3.1 and Figure Q-2). In addition, NWC personal field notes were reviewed for WGS locations within the Facility vicinity (Kronner, 2009). Habitats were then assigned habitat quality ratings (Exhibit P, Attachment P-7).

No federal-listed or candidate wildlife species were identified as potentially occurring within the analysis area. The following state-listed or candidate wildlife species were identified as potentially occurring within the analysis area based on existing habitat conditions: WGS and bald eagle. Some areas within the site boundary were previously surveyed for Pebble Springs in spring 2006 (PPM, 2006) and for LJIIB in the spring of 2009 (NWC, 2009a). Additional wildlife surveys are also planned for the spring of 2010. These surveys will be conducted prior to construction, and the Applicant has committed to designing the permanent Facility components and temporary disturbance areas to avoid any threatened, endangered, or candidate species found during these clearance surveys.

Following is a summary of the biological investigations, including those surveys that are ongoing or planned for 2010:

- Pre-field literature review, soil maps review, database queries, site reconnaissance, and agency consultation.
- Wildlife habitat mapping and categorization in 2009; field verification and re-assessment of categories, if needed, pending results of 2010 wildlife surveys.
- Avian use surveys of five plots conducted for a full year: fall season 2008, winter season 2008–2009, spring and summer seasons 2009.
- Avian use surveys of six plots in fall season 2009 in areas not covered by previous avian use surveys. Results of these ongoing surveys for seasons not yet completed will be presented in an addendum to this report.
- Raptor nest surveys in 2009, and planned spring 2010 surveys.
- Washington ground squirrel surveys conducted in spring 2008, and planned 2010 spring season surveys.
- Other special status vertebrate wildlife species surveys conducted in spring 2008, and planned 2010 spring season surveys.

- Bat species review for species occurrence in the general area.

Survey methods are detailed in the NWC Biological Investigations Report (Exhibit P, Attachment P-7).

Before beginning construction, the Applicant will provide to the Department a map showing the final design locations and areas that would be disturbed during construction. Category 1 habitat for WGS, Laurent's milk-vetch, sessile mousetail, and other identified threatened, endangered, or candidate species populations will be avoided. The Applicant will instruct all construction personnel to avoid these areas and will implement other appropriate measures to protect the resources. Category 1 WGS habitat, Laurent's milk-vetch, sessile mousetail populations will be avoided as described in Section Q.4.

Q.3 EXISTING CONDITIONS AND POTENTIAL IMPACTS TO SPECIAL-STATUS SPECIES

OAR 345-021-0010(1)(q)(B) *For each species identified under (A), a description of the nature, extent, locations and timing of its occurrence in the analysis area and how the facility might adversely affect it;*

Response:

Q.3.1 Overview

According to the database results received from ORNHIC and the species lists from USFWS, 47 state and federally listed species were identified as potentially occurring within the site boundary or a 5-mile analysis area (see Table Q-1). Species addressed in this Exhibit that potentially occur in Gilliam, Morrow, and Klickitat counties include gray wolf, fisher, WGS, bald eagle, northern spotted owl, yellow-billed cuckoo, Oregon spotted frog, seven fish populations, the Mardon skipper butterfly, Ute ladies'-tresses, northern wormwood, Laurent's milk-vetch, sessile mousetail, dwarf evening primrose, clustered lady's-slipper, Suksdorf's desert-parsley, white meconella, disappearing monkeyflower, Barrett's beardtongue, obscure buttercup, and pale blue-eyed grass (see Table Q-1). The following species: gray wolf, fisher, northern spotted owl, Oregon spotted frog, Mardon skipper, Ute ladies'-tresses, northern wormwood, clustered lady's-slipper, Suksdorf's desert-parsley, white meconella, Barrett's beardtongue, obscure buttercup, persistent sepal yellowcress, and pale blue-eyed grass, which are only found on the USFWS' Klickitat County list, are not likely to occur in or near the Facility site boundary because of the species' ranges and/or lack of suitable habitat at the site or adjacent to the site. In addition, the seven fish populations are unlikely to occur in or near the Facility site boundary because the project area lacks perennial stream habitat. Because there are no impacts expected to these species, they are not addressed further in this Exhibit.

Q.3.2 Identification of Species that Might be Affected

Based on literature review, technical report review, the experience of field surveyors, and preliminary agency contacts, a list was generated of all listed plant and wildlife species either known to occur or having the potential to occur within the analysis area. Table Q-1 lists those species included in the USFWS Gilliam, Morrow, and Klickitat counties, Oregon, and the ORNHIC database search for the 5-mile analysis area, along with a description of potential occurrence based on the literature review and field surveys.

This Exhibit includes state and federally listed, candidate, and proposed species; non-listed special-status species, including federal species of concern, state sensitive species, and other nonlisted, rare species, and species that are only listed or candidates for listing in Washington State (i.e. species that are not also federal or Oregon State-listed or candidates for listing) are addressed in Exhibit P. Candidate and proposed species are included in this Exhibit because of their potential to be listed during the energy facility siting process. A narrative discussion of all species on the broader list follows, along with a more in-depth review for the WGS, bald eagle, Laurent's milk-vetch, sessile mousetail, and dwarf evening primrose, the species with documented habitat and/or occurrence in the general area.

Q.3.2.1 Plants

According to the information reviewed from USFWS and ORNHIC, state and federally listed and candidate wildlife species that occur or possibly occur in Gilliam, Morrow, and Klickitat counties are Ute ladies'-tresses, northern wormwood, Laurent's milk-vetch, sessile mousetail, dwarf evening primrose, and persistent sepal yellowcress. Of these, Laurent's milk-vetch sessile mousetail were confirmed within the site boundary and dwarf evening primrose potentially occurs, based on a review of habitat suitability within the site boundary. Because there is no suitable habitat and/or the Facility would be located outside of the historical and/or current range of the other three plant species, they are not addressed further in this Exhibit.

Q.3.2.2

Laurent's Milk-vetch

Natural History and Occurrence in the Analysis Area

Laurent's milk-vetch is Oregon state listed as threatened. This species has no federal or Washington State status.

In 2009, during a rare plant survey for LJIIB, NWC discovered a population of Laurent's milk-vetch near Alkali Canyon (NWC, 2009a). This population is located within the site boundary of the Montague Facility. ORNHIC also provided a historical record (1950) of the species located within the 5-mile area, but outside of the site boundary (ORNHIC, 2009). Laurent's milk-vetch is a perennial, so if additional populations occur, this present should be present throughout the year. Additional botanical surveys are planned during

the appropriate bloom period in 2010 to identify if other populations are present within the site boundary.

Potential Impacts

Primary threats to this species include roadside herbicide application and livestock grazing. The Applicant will implement the measures described under Section Q.4, including micrositing facilities away from populations and avoiding confirmed populations within 200 feet of proposed construction areas. Weed control measures will also be implemented as described in the Revegetation Plan and Weed Control Plan required as part of the Site Certificate. Therefore, no impacts are expected to occur to populations of Laurent's milk-vetch.

Sessile Mousetail

Natural History and Occurrence in the Analysis Area

Sessile mousetail is a state candidate for listing as threatened or endangered and a federal species of concern. It has no status in Washington State.

Sessile mousetail occurs in alkali flats and vernal pools. ORNHIC reported two populations of sessile mousetail within the 5-mile analysis area, but outside of the site boundary. The nearest of these is approximately 0.31 mile north of the western portion of the site boundary on the opposite side of a railway corridor. The other documented population of sessile mousetail is located within the LJII site boundary](NWC, 2009a). Five additional populations were documented within the analysis area for the nearby Pebble Springs wind-energy facility, including two populations within the Montague site boundary. In addition, the Applicant identified potentially suitable alkaline seasonal wetland/vernal pool habitat for this species in several areas within the Facility site boundary (Figure Q-3). Sessile mousetail is a perennial, so if additional occurrences were present on the site they would be present year-round, though this species would be difficult to distinguish during the dry and non-growing periods. Botanical surveys are planned during the appropriate bloom period in 2010 to identify any additional populations present within the site boundary.

Potential Impacts

As with the Laurent's milk-vetch, primary threats to this species include roadside herbicide application and livestock grazing. The Applicant will implement the measures described under Section Q.4, including micrositing facilities away from populations and installing exclusion fencing around confirmed populations within 200 feet of proposed construction areas. Weed control measures will also be implemented as described in the Revegetation Plan and Weed Control Plan required as part of the Site Certificate. Therefore, no impacts are expected to occur.

Dwarf Evening Primrose

Natural History and Occurrence in the Analysis Area

Dwarf evening primrose is an Oregon State candidate for listing as threatened or endangered and a federal species of concern. It is also classified as a sensitive species in Washington State.

This species occurs on unstable soil or gravel in steep talus, dry washes, banks and roadcuts. ORNHIC had no record of dwarf evening primrose within the 5-mile analysis area and no populations of this species were reported from adjacent and nearby facilities including LJI, LJII, Pebble Springs, Shepherds Flat (NWC and WEST, 2005; PPM, 2006; CSF, 2007). However, potentially suitable habitat for this species occurs within the site boundary (see Exhibit P, Attachment P-9). Dwarf evening primrose is an annual, so if it occurred on the site it would not be present year-round. Botanical surveys are planned during the appropriate bloom period in 2010 to identify any additional populations present within the site boundary.

Potential Impacts

Dwarf evening primrose has not been documented in the analysis area. Primary threats to this species include resource extraction (gravel), roadside herbicide application and drift, and exotic plant invasion. The Applicant will implement the measures described under Section Q.4. In the unlikely event that this species is identified during preconstruction surveys, the Applicant will microsite facilities away from populations and install exclusion fencing around confirmed populations within 200 feet of proposed construction areas. Therefore, no impacts to dwarf evening primrose are expected to occur.

Q.3.2.3 Wildlife

According to the information reviewed from USFWS and ORNHIC, state and federally listed and candidate wildlife species that occur or possibly occur in Gilliam, Morrow, and Klickitat counties, are the gray wolf, fisher, WGS, bald eagle, northern spotted owl, yellow-billed cuckoo, Oregon spotted frog, Middle Columbia steelhead Evolutionarily Significant Unit (ESU), Snake River basin steelhead ESU, Snake River Chinook ESU, Middle Columbia steelhead ESU, bull trout, and Mardon skipper. The county lists include the extent of each county, which takes in higher elevation and forested habitats where additional listed or candidate species may occur. Of these, only the WGS and bald eagle are likely to occur based on a review of habitat suitability within the site boundary. Because there is no suitable habitat for the remaining species and because, for many of these species, the Facility would be located outside of their historical and/or current range, they are not addressed further in this Exhibit.

Washington Ground Squirrel

Natural History and Occurrence in the Analysis Area

WGS Studies for the Facility. The WGS is a state endangered species and a federal candidate for listing as threatened or endangered.

Historically, this species was abundant in the sagebrush (*Artemisia tridentata*) and bluebunch wheatgrass (*Pseudoroegneria spicata*) habitats throughout the Columbia plateau east and south of the Columbia River in Washington and Oregon (Bailey, 1936; Howell, 1938). The extent of its current range is not known with certainty, but it is greatly reduced from the historic range (Betts, 1999). Agricultural and grazing activities have fragmented and disturbed the native vegetation. Today, much of the remaining native habitat is dominated by rabbitbrush (*Chrysothamnus viscidiflorus* and *C. tectorum*) and cheatgrass (*Bromus tectorum*) or is grazed intensively, reducing forage and cover for the ground squirrels. In this degraded habitat, the WGS is found most often in areas that have good cover (annual grasses and forbs) and deep, loose soils with low clay content, enabling burrow excavation.

Detections (holes, pellets, individuals, or vocalizations) were discovered within the Facility site boundary in 12 locations in March 2008 and in one location in 2006/2007 (Table Q-2, Figure Q-2 and Figure 5 in Attachment P-7). Table Q-2 describes each location's characteristics and other pertinent information. WGS were seen in three locations, vocalizations confirming presence were heard in one location, and fresh pellets were found in several locations. Most locations were very small in size ranging from one to three holes, but at four sites, there were multiple individuals (number undetermined) as confirmed by numerous WGS holes (7 to more than 10). Most active sites were noted in rabbitbrush/snakeweed shrub-steppe habitat, but three were in sagebrush shrub-steppe habitat. The 2006/2007 WGS area (Kronner, 2009) was in sagebrush shrub-steppe and native perennial grassland habitats (Table Q-2).

Locations where WGS sign of use (holes, pellets, vocalizations) were recorded in 2008 and 2009 within 2010 survey corridors will be re-visited once in 2010 to confirm activity status. Unsurveyed Facility corridors will also be surveyed; two surveys will be conducted. Results of the 2008, 2009 and planned 2010 wildlife surveys will be reported following the 2010 surveys.

WGS Studies for Other Facilities. WGS were detected at two additional locations within the Facility site boundary during surveys conducted for other wind projects (Figure 5 in Attachment P-7). One location with approximately 10 holes and pellets in rabbitbrush/snakeweed shrub-steppe habitat was found during surveys for LJIIB (NWC, 2009b, see Attachment P-7). This cluster of burrows is located within the Facility site boundary to the east of the proposed G turbine string. The second location was a confirmed WGS hole at Pebble Springs in 2006. The WGS hole was found in perennial grassland habitat (PPM, 2006) located within what is now the northern part of the Facility site boundary near the proposed transmission line, but this location was not found to be active in 2009 (Gritski et al., 2009b). Surveys are planned for the area in 2010.

Table Q-2. Washington Ground Squirrel Detections within the Montague Site Boundary

WGS Site #	Soils	Mapped Habitat Type (2009)	Estimated Size	General Notes	General Location
1	4C	SSA	Very small	Holes plus droppings	Western portion of Facility
2	4C	SSA	Very small	3 holes, fresh pellet	Western portion of Facility
3	4C	SSA	Small	7-8 holes	Western portion of Facility
4	23B	SSB	Small	Approx. 10 holes	Western portion of Facility
5	23C	SSB	Very small	1 fresh hole, 1 fresh pellet	Western portion of Facility
6	56B	GA	Small	10+ holes, vocalization	Western portion of Facility
7	23B	SSB	Very small	3 holes, 1 dropping	Northeastern portion of Facility
8	55B	SSB	Very small	1 dropping, 1 hole	Northeastern portion of Facility
9	55D	SSB	Small	Numerous holes, dropping	Northeastern portion of Facility
10	40D	SSB	Very small	WGS seen + lots of holes	Northeastern portion of Facility
11	40D	SSB	Very small	WGS seen, old dropping	Northeastern portion of Facility
12	55C,55E	SSA, GB	Unknown	WGS seen from Tree Lane in 2006 and 2007	Central portion of Facility
13	55B	SSB	Very small	1 hole with WGS dropping found incidentally while onsite	Northeastern portion of Facility

Source: Kronner, 2009 (Attachment P-7)

Estimated Size (based on one survey in March (Sites 1-11) and incidental observations obtained from other sources (Sites 12 and 13).

Very Small = < 10 individuals, usually single to several holes, may be one or a few individuals. Small = 10 to 30 individuals.

Medium = 30 to 40 individuals. Large = 40 to 100+ individuals.

Soils

- 4C – Blalock loam
- 23B, 23C – Olex silt loam
- 40D – Sagehill fine sandy loam
- 55B, 55C, 55D, 55E – Warden silt loam
- 56B – Willis silt loam

Mapped Habitat Types

- SSA – Shrub-steppe, Sagebrush
- SSB – Shrub-steppe, Rabbitbrush/Snakeweed
- GA – Grassland, Exotic Annual Grass
- GB – Grassland, Native Perennial

Potential Impacts

As discussed extensively in Exhibit P, no temporary or permanent facilities are proposed within Category 1 WGS habitat. During micro-siting, all staging areas, turbines, roads, and collector lines and other temporary and permanent disturbance will be located outside of Category 1 WGS habitat. In addition, the Applicant will implement mitigation measures to avoid impacts to WGS such as flagging off Category 1 WGS habitat, monitoring construction in this area and implementing speed limits, and mitigating for impacts to Category 2 habitat as described in Section Q.4.

As a result of avoidance and minimization measures, no displacement or abandonment of WGS colonies are expected to occur, as demonstrated by extensive informal monitoring of WGS colonies during and after construction of Stateline turbine strings WS-A and B (FPLE, 2002a, 2002b, 2002c; Erickson et al., 2004), and the Leaning Juniper I (LJI) operational monitoring and Incidental Take Permit (ITP) reporting (NWC, 2007; Kronner, 2005, 2006). Accordingly, no significant impacts are expected to occur that could cause a significant reduction in the likelihood of the survival or recovery of the species.

Bald Eagle

Natural History and Occurrence in the Analysis Area

The bald eagle is a state threatened species. This species was removed from the federal list of endangered species in 2007; however, it is still federally protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

The bald eagle is closely associated with freshwater, estuarine, and marine ecosystems that provide abundant prey and suitable habitat for nesting and communal roosting. Breeding territories are typically located within 1 mile of permanent water in predominantly coniferous, uneven-aged stands with old-growth structural components. Bald eagles winter along ice-free lakes, streams, and rivers where food and perch sites are abundant and the level of human disturbance is low. Communal night roosts are used by bald eagles primarily during the winter months. In the Pacific Northwest, communal roosts generally occur in multi-layered mature or old-growth conifer stands that provide protection from weather and human disturbance.

Home-range size varies greatly, according to food abundance and the availability of suitable nest and perch trees. Favored nest trees are usually the largest trees or snags in a stand that provides an unobstructed view of the surrounding area and a clear flight to and from the nest (Isaacs and Anthony, 2001; Isaacs, 2004). Nests are usually built on limbs just below the crown, with the canopy above providing cover. Nesting behaviors typically begin in January, followed by egg laying and incubation in February and March. Young are reared throughout April, May, and June. Fledging occurs in July and August. Bald eagles are primarily predators, but they are also opportunistic scavengers that feed on a variety of prey, including salmon, other fish, small mammals, waterfowl, seabirds, and carrion (Snow, 1981). Bald eagles usually forage in large open areas with a wide visual field and suitable perch trees near the food source.

Bald eagles winter along the Columbia River several miles north of the Facility site boundary. One bald eagle was recorded during each of the avian use studies at the nearby Rattlesnake Road and Willow Creek Wind Power projects (Kronner et al., 2007a and 2007b) and a single individual was also observed during the avian use study for the nearby Shepherds Flat Wind Power Project (CSF, 2007). No bald eagles were observed during avian use studies conducted for LJI, LJII, and Pebble Springs projects (NWC, 2009a; PPM 2006). Bald eagles were not observed during wildlife surveys of the Facility either.

Potential Impacts

Bald eagles winter along the Columbia River several miles north of the Facility site boundary and might pass through the site boundary infrequently during spring and fall migration or during the winter. However, as mentioned earlier, no bald eagles were observed in the vicinity of the Facility during wildlife surveys, and the nearest known nest is more than 22 miles away from the Facility site boundary (Flick, 2009). Also, as noted above, individual bald eagles were observed during fixed-point surveys conducted for the nearby Rattlesnake Road and Willow Creek projects (Kronner et al., 2007a and 2007b) and a single individual was also observed during the avian use study for the nearby Shepherds Flat Wind Power Project (CSF, 2007). These observations were outside of the Facility 2-mile survey area for raptor nesting, but within approximately 5 miles of the Facility site boundary.

Potential direct impacts to this species may occur as strikes from operating turbines resulting in injuries or fatalities. However, unlike golden eagles, bald eagles do not appear susceptible to colliding with wind turbines, probably because of their differences in foraging habits (golden eagles are predators and move through the landscape in search of upland prey, whereas bald eagles tend to feed on fish or scavenge on carcasses and are attracted to cattle feedlots where calving occurs). In addition, there have been no reported instances of bald eagle fatalities at any U.S. wind facility (Erickson et al., 2001) or in interviews with regional wind facility managers (NWC, 2005 and 2006). The likelihood of these impacts is extremely small as a result of this species' limited use of the Facility vicinity. No construction effects are expected as bald eagles appear to use the area only incidentally during migration. Therefore, it is unlikely the Facility will have measurable effects on bald eagles or cause a significant reduction in the survival or recovery of the species.

Q.4 MEASURES PROPOSED TO AVOID OR REDUCE ADVERSE IMPACTS

OAR 345-021-0010(1)(q)(C) *For each species identified under (A), a description of measures proposed by the applicant, if any, to avoid or reduce adverse impact;*

Response: The Applicant has implemented or will implement several measures to avoid or reduce adverse impacts on threatened and endangered species. Additional measures for non-listed special status wildlife and habitat are provided in Exhibit P, Section P.9. The Applicant is not proposing measures to avoid or reduce adverse impacts to other species identified under OAR 345-021-0010(1)(q)(A) above, because, as discussed under OAR 345-021-0010(1)(q)(B), adverse impacts are not anticipated. Nonetheless, the measures proposed below will also be protective of other species in addition to the WGS.

Q.4.1 Prior to Construction

Q.4.1.1 Avoidance in Facility Design

The Applicant sited the proposed turbines and other permanent and temporary facilities that were closest to WGS outside of the Category 1 WGS habitat, as shown in Figure Q-2. Following review of the 2008 WGS data, the Applicant moved six turbine strings and

associated facility components away from historic WGS locations. In particular, turbine strings A, D, F, G, T and U were reconfigured and associated access roads and collector lines were lengthened to route them around WGS burrows and the 785 foot buffer zone so as not to encroach on Category 1 WGS habitat. Several turbines were also removed from turbine strings D and G to avoid the Category 1 WGS habitat. Following the planned 2010 wildlife surveys, the Applicant will microsite the Facility to avoid any additional Category 1 WGS habitat identified during these surveys.

Q.4.1.2 Avoidance During Micrositing

After the final layout has been better defined, additional plant and wildlife surveys will be conducted to identify state and federally listed species. These surveys will be conducted prior to construction, and the Applicant has committed to designing and micrositing the Facility to avoid any threatened or endangered species locations such as Category 1 WGS habitat found during these clearance surveys.

Before beginning construction, the Applicant will provide to the Department a map showing the final design locations and areas that would be disturbed during construction. The Applicant will hire qualified personnel to conduct a field investigation of the final layout, and provide a written report of the field investigation to the Department to detail any identified state and federally listed wildlife species.

Where any Category 1 WGS habitat or other state or federal listed or candidate wildlife species are found during the initial or pre-construction field surveys, the Applicant will ensure that construction and operation of the facility will have no impact on the resources. The Applicant will instruct all construction personnel to avoid these areas and will implement other appropriate measures to protect the resources. Category 1 WGS habitat will be flagged and avoided during construction, as further described in Section Q.4.2 below.

All Facility components will be microsituated outside of the Category 1 WGS habitat. In addition, potential Facility-related disturbance in habitat adjacent to Category 1 WGS habitat will be minimized to the extent feasible and impacts to Category 2 habitat will be mitigated as described in the Habitat Mitigation Plan (HMP) that the Applicant will implement similar to the HMP implemented for the LJII facility. Because WGS colonies can change size and shape from year to year, surveying the colony edge prior to construction will ensure that the sensitive area is correctly marked with exclusion flagging and avoided during construction. In addition, high quality native habitat on the Facility site will be avoided where possible for temporary and permanent impacts to retain habitat cover in the general landscape (habitat is subject to landowner's use however).

Q.4.2 Avoidance and Minimization during Construction

The Applicant has committed to implementing protective measures for threatened and endangered species during construction, as summarized below.

Construction Monitoring

The Applicant uses an onsite manager and requires the construction contractors to designate a Field Contact Representative (FCR) to oversee their compliance during construction. The FCR is responsible for overseeing compliance with environmental protective measures and coordination in accordance with the county and other regulatory agencies.

Qualified biologist(s) will provide environmental training and monitoring during construction. A qualified biologist will visit the site periodically before site development and during construction in order to flag the Category 1 WGS habitat and other sensitive resource areas and oversee construction and permit compliance.

Exclusion Flagging

All Facility components will be microsituated to avoid the Category 1 WGS habitat and threatened, endangered, or candidate species populations. The biological monitor will mark Category 1 WGS habitat, any sessile mousetail and Laurent's milk-vetch populations, and other threatened, endangered, or candidate species with brightly colored pin flags or wooden lathes and signing, and instruct the contractor to work outside these boundaries.

Dust Control

The Applicant proposes to mitigate impacts from dust deposition through water applications to disturbed ground during construction, by graveling of permanent roadways, by erosion control, by revegetation, and by imposition of construction and operation speed limits of 20 miles per hour (mph). Spraying of water on disturbed ground is an effective dust deterrent, as is reduction of speeds on graveled roads. Water application to disturbed areas and vehicle speed limit impositions are expected to reduce dust during construction to levels without significant impact on vegetation or wildlife species. Upon completion of construction, many of the unimproved roads on the Facility site previously used for access to the area will have been graveled. Existence of these roads should significantly reduce traffic on the many unimproved roads and 4-wheel drive tracks now within the site boundary. It is likely that overall post-construction dust production from vehicular traffic on the site will be reduced from current conditions.

Erosion Control

To minimize impacts to the Facility habitat, the Applicant will prepare an Erosion and Sediment Control plan in accordance with a NPDES 1200-C permit and will require the contractor to install erosion and siltation controls near riparian areas and other appropriate locations as designated in this plan. The FCR or a designated person under the FCR will monitor the erosion and siltation controls onsite to ensure that they are in working condition.

Environmental Training

The Applicant will provide an environmental training course for the construction contractors that will provide information on the sensitive species present onsite, the exclusion flagging/signing, permit requirements, and other environmental issues.

The training will also cover proper protocol for responding to dead or injured wildlife, as will be described in the Wildlife Monitoring and Mitigation Plan (WMMP) for the Facility. The WMMP will be developed in consultation with ODFW and ODOE and will be similar to the WMMP implemented for nearby Facilities such as LJII and Shepherds Flat, as required by the Site Certificate. Construction and operations personnel will be required to report any injured or dead wildlife detected while on the site to the biological monitor during construction or appropriate onsite manager during operations. Construction site personnel will be required to attend the environmental training in conjunction with hazard and safety training prior to working onsite. The Applicant's construction contractor will maintain a list of onsite construction personnel who have received the training.

Limited Work Areas

Construction work will be limited to the approved and surveyed areas shown on project constraints maps. No working or driving cross-country within the site boundaries as shortcuts or for any other purposes will be permitted without prior approval from appropriate authorities.

Speed Limits

Construction personnel will be instructed to observe caution when driving through the project area and to maintain reasonable driving speeds of 20 mph (particularly during the period from 1 hour before sunset to 1 hour after sunrise) so as not to harass or accidentally strike wildlife. Speed limits will be posted throughout the Facility construction area.

Fire Control

The Applicant will be prepared for a quick response to wildfires that could impact the natural (wildlife habitat) environment.

Q.4.3 Minimization and Mitigation after Construction

After construction is complete, the Applicant will work to restore the habitat to preconstruction standards.

Habitat Restoration

The Applicant will implement a Revegetation Plan for the Facility similar to the Revegetation Plan implemented for nearby Facilities such as LJII and Shepherds Flat, as required by the Site Certificate. In order to reestablish plant communities of most value to wildlife, native species will be used in nonagricultural areas to the maximum extent possible.

Habitat Conservation

For habitat impacts that cannot be avoided or minimized, mitigation will be developed by means of reliable methods and in compliance with OAR 345-022-0060, as described in Exhibit P. The Applicant will implement a HMP for the Facility similar to the HMP implemented for the LJII facility. The Plan will describe the preservation and enhancement of a conservation area to mitigate for the impacts of the facility on wildlife habitat. The property will be protected under a conservation easement for the life of the Facility. The proposed mitigation area for the Facility is located within the same 440-acre parcel identified for mitigation of habitat impacts from the LJII Facility, as shown on Figures P-13 and P-14. The parcel is located in a relatively remote setting where habitat protection and enhancement are feasible and sufficient land area is available to accommodate the size of the mitigation area, based on a worst-case estimate, as described in the LJII Final Order and HMP. The mitigation measures would likely result in conservation of suitable habitat for listed species such as the WGS, ensuring availability of undisturbed native habitat for the life of the Facility.

Fire Control

The Applicant will be prepared for a quick response to wildfires that could impact the natural (wildlife habitat) environment.

Q.5 NO SIGNIFICANT REDUCTION IN THE LIKELIHOOD OF SURVIVAL OR RECOVERY OF PLANT SPECIES

Q.5.1 Identified Plant Species with an ODA Protection and Conservation Program

OAR 345-021-0010(1)(q)(D) *For each plant species identified under (A), a description of how the proposed facility, including any mitigation measures, complies with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3);*

Response: Protection and Conservation Programs are prepared by ODA for selected plant species listed as threatened or endangered under the Oregon Endangered Species Act (ESA) and selected locations within the state. There is no plant protection and conservation program applicable to the site. Therefore, no additional information is required under this provision and OAR 345-022-0070(1)(a) does not apply.

Q.5.2 Identified Plant Species without an ODA Protection and Conservation Program

OAR 345-021-0010(1)(q)(E) *For each plant species identified under (A), if the Oregon Department of Agriculture has not adopted a protection and conservation program under ORS 564.105(3), a description of significant potential impacts of the proposed facility on the continued existence of the species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species;*

Response: Protection and Conservation Programs are prepared by ODA for plant species listed as threatened or endangered under the Oregon Endangered Species Act.

There is no plant protection and conservation program applicable to the site. In compliance with these requirements, Section Q.3 describes the potential impacts of the proposed Facility on the continued existence of state and federally listed and candidate plant species and on the suitable habitat for these species. The mitigation measures described in Section Q.4 are designed to avoid or minimize adverse impacts on listed and candidate plant species. The construction, operation, and maintenance of the Facility, as described, and taking into account the proposed mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the state threatened Laurent's milk-vetch, the state candidate sessile mousetail, or the state candidate dwarf evening primrose.

Q.6 NO SIGNIFICANT REDUCTION IN THE LIKELIHOOD OF SURVIVAL OR RECOVERY OF FISH AND WILDLIFE SPECIES

OAR 345-021-0010(1)(q)(F) *For each animal species identified under (A), a description of significant potential impacts of the proposed facility on the continued existence of such species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species;*

Response: In compliance with these requirements, Section Q.3 describes the potential impacts of the proposed Facility on the continued existence of state and federally listed and candidate wildlife species and on the suitable habitat for these species. The mitigation measures described in Section Q.4 are designed to avoid or minimize adverse impacts on the listed and candidate wildlife species. The construction, operation, and maintenance of the Facility, as described, and taking into account the proposed mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the state endangered WGS or the state threatened bald eagle.

Washington Ground Squirrel

The Facility will have no significant impact on the survival or recovery of this species. No Facility components will be placed within Category 1 WGS habitat. During micro-siting, staging areas, turbines, roads, and collector lines and other temporary and permanent disturbance will be located outside Category 1 WGS habitat to protect this species.

The proposed development will not affect connectivity between WGS colonies or the survival or recovery of the species. No displacement or abandonment of WGS colonies is likely to occur, as demonstrated by extensive informal monitoring of WGS colonies during and after construction of Stateline turbine strings WS-A and B (FPLE, 2002a, 2002b, 2002c and Erickson et al., 2004), and the Leaning Juniper I (LJI) operational monitoring and Incidental Take Permit (ITP) reporting (NWC, 2007; Kronner, 2005, 2006). Accordingly, no significant impacts are expected to occur that could cause a significant reduction in the likelihood of the survival or recovery of this species.

Bald Eagle

The Facility will have no significant impact on the survival or recovery of this species. No bald eagles have been documented nesting within 5 miles of the site boundary. The nearest documented bald eagle nest is located more than 20 miles from the project (Flick, 2009). This species was not observed during wildlife surveys for the project, and their only use of the area around the Facility site boundary might be flying through, which is expected to be infrequent. For these reasons, the Facility is not likely to cause a significant reduction in the likelihood of survival or recovery of this species.

Q.7 MONITORING PROGRAM

OAR 345-021-0010(1)(q)(G) *The applicant's proposed monitoring program, if any, for impacts to threatened and endangered species;*

Response: The Applicant will implement a WMMP for the Facility similar to the WMMP implemented for nearby Facilities such as LJII and Shepherds Flat, as required by the Site Certificate. The WMMP will include avian and bat mortality monitoring, as well as monitoring of special status raptor nests within the Facility site boundary. Post-construction monitoring of WGS colonies will also be conducted, as described in WMMPs for nearby Facilities.

Q.8 PROPOSED SITE CERTIFICATE CONDITIONS

The Applicant proposes that site certificate conditions such as conditions 45, 84, 85, 87, and 89 from the LJII Site Certificate be included in the site certificate for the Montague Wind Power Facility. Specifically, the Applicant proposes the following conditions:

Condition 45

Before beginning construction, the certificate holder will provide to the Department a map showing the final design locations of all components of the facility and areas that would be disturbed during construction and also showing the areas that were surveyed for cultural resources as described in the site certificate application. If areas to be disturbed during construction lie outside of the surveyed areas, the certificate holder shall hire qualified personnel to conduct field investigation of those areas. The certificate holder shall provide a written report of the field investigation to the Department and to the State Historic Preservation Office (SHPO). If any historic, cultural, or archaeological resources are found during the field investigation, the certificate holder shall ensure that construction and operation of the facility will have no impact on the resources. The certificate holder shall instruct all construction personnel to avoid these areas and shall implement other appropriate measures to protect the resources.

Condition 84

The certificate holder may construct turbines and other facility components within the site boundary, 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) *The certificate holder shall design and construct facility components that are the minimum size needed for safe operation of the energy facility.*
- (c) *In the final design of the facility within micrositing areas, the certificate holder shall reduce the impact on essential or important habitat (Category 4 and above) to the extent practical.*
- (d) *As a protective measure during construction, the certificate holder shall install exclusion fencing around confirmed populations of Laurent's milk-vetch and sessile mouse-tail. The certificate holder shall not install facility components or cause temporary disturbance within these areas. Before beginning construction, the certificate holder shall verify the protected status of sessile mouse-tail and notify the Department. If the species has been upgraded to threatened or endangered under State or federal law, the certificate holder shall take appropriate mitigation actions, subject to Department approval.*
- (e) *If construction would affect locations within the micrositing areas that were not previously surveyed for the occurrence of State or federal threatened or endangered species, the certificate holder shall conduct additional pre-construction surveys of those locations, notify the Department of the findings and implement appropriate avoidance or mitigation measures for any threatened or endangered species detected, subject to Department approval.*

Condition 85

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

- (a) *Preparing maps to show sensitive areas, such as nesting or denning areas for sensitive wildlife species, that are off limits to construction personnel.*
- (b) *Before construction begins, the certificate holder shall have a qualified biologist place exclusion markers around sensitive wildlife habitat areas, including Category 1 Washington ground squirrel (WGS) areas and an appropriate buffer around these areas. The certificate holder shall maintain the exclusion markings until construction has been completed.*
- (c) *Ensuring that a qualified person instructs construction and operations personnel to be aware of wildlife in the area and to take precautions to avoid injuring or destroying wildlife or sensitive wildlife habitat.*
- (d) *Avoiding unnecessary road construction, temporary disturbance and vehicle use.*
- (e) *Posting and maintaining speed limit signs (not to exceed 20 miles per hour) on access roads throughout the site. The certificate holder shall ensure that all construction and operations personnel are instructed to observe caution when driving in the facility area to avoid injury or disturbance to wildlife enforce and for personal safety.*

Condition 87

The certificate holder shall conduct wildlife monitoring as described in the Wildlife Monitoring and Mitigation Plan that is incorporated in the Final Order on the Application and as amended from time to time.

Condition 89

The certificate holder shall acquire the legal right to create, enhance, maintain and protect a habitat mitigation area as long as the site certificate is in effect by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the Habitat Mitigation Plan that is incorporated in the Final Order on the Application and as amended from time to time.

These four proposed conditions assure appropriate actions are undertaken to assure that Laurent's milk-vetch, sessile mousetail and WGS and other threatened, endangered or candidate species are adequately protected during the Facility's construction and operation.

Q.9 CONCLUSION

Three populations of two plant species that are state or federally listed or candidates for listing under ORS 564.105(2) were documented within the site boundary. In addition, potentially suitable habitat is present for another state candidate plant species. One state-listed endangered species, the WGS, is located within the site boundary, and one state-listed threatened species, the bald eagle, might travel through the area, but neither they nor their habitat will be significantly affected by the Facility. Avoidance and mitigation measures built into the Facility location and design will reduce the potential for impacts to insignificant levels. Therefore, based on the information provided in this Exhibit, there is sufficient evidence upon which the Council may find that the Facility, taking into account the proposed mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of threatened or endangered plant or wildlife species within the analysis area. Accordingly, the Applicant demonstrates that OAR 345-022-0070 is met.

Q.10 REFERENCES

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Figures

Figures Q-2 and Q-3 are confidential and not for public distribution.

ATTACHMENT Q-1

**Preliminary Rare Plant Evaluation for the
Montague Wind Power Facility**