Shepherds Flat North

Department Responses to Comments on the Request for Amendment #1

On November 3, 2009, the certificate holder submitted a "Request to Amend the Site Certificate for Shepherds Flat North" (Request for Amendment #1). The Department issued a public notice on the amendment request and accepted comments through December 11, 2009. The Department received comments from the persons and agencies listed below. In the table that follows, the Department has summarized the issues raised in the comments and has provided a response.

- Reviewing Agencies
  Sarah Kelly, Oregon Department of State Lands
  Jerry Sauter, Oregon Water Resources Department
  Rose Owens, Oregon Department of Fish and Wildlife
  Todd Hesse, Oregon Department of Environmental Quality
- Public Comments
  Johnson Meninick, Confederated Tribes and Bands of the Yakama Nation
  Marisa Meyer and Gary Miller, U.S. Fish and Wildlife Service
  Leslie Nelson, The Nature Conservancy

Comment	Response
Reviewing Agency Comments	
Sarah Kelly, Oregon Department of State Lands (email)	
"A wetland delineation was approved by our Department on 11/10/09. However, I could not tell if the approved delineation included the additional areas added by the amendment. The delineation may need to be amended to include these new areas."	[1] The delineation did not include the proposed new transmission corridor between the previously-approved SFC site boundary and Slatt. Proposed Condition 103 would require a preconstruction survey of lands not previously surveyed for wetlands and other waters of the State and avoidance of any jurisdictional waters found in those areas.
"The applicant should check with the Eastern Region Manager, Randy Wiest, to ensure that no access agreements are required from State Lands for the project to move forward."	[2] The certificate holder has consulted with Randy Wiest. The SFN site is located on private land. No access agreements from DSL are necessary.
Jerry Sauter, Oregon Water Resources Department (letter)	
The amendment raised no issues of concern.	
Rose Owens, Oregon Department of Fish and Wildlife (email and letter)	
"ODFW continues to be concerned about cumulative impacts in the Columbia Plateau Ecoregion from the ever-increasing numbers of wind projects, as well as from other development, which result in ever-increasing avian and bat fatalities and native habitat loss. ODFW would like to engage ODOE, as well as other interested parties (e.g., U.S. Fish and Wildlife Service and the wind industry) in discussions about how recommendations about cumulative impacts, that were included in the Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines, could collectively be implemented."	[3] The Department supports further discussions with all interested parties to clarify concerns about cumulative effects and to develop appropriate recommendations for the Siting Council.

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"ODFW recommends that the Applicant complete surveys for any sensitive, threatened or endangered species that have potential to inhabit the transmission corridor that has not been previously surveyed during the original application planning process. Washington ground squirrel (WGS) surveys need to be completed if the area is suitable WGS habitat."	[4] All but 8.8 acres of the transmission corridor that would be added to the SFN site lies within the previously-approved site boundary of SFC, which has been surveyed for sensitive, threatened and endangered species as described in the *Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), pp.90-96 and 98-99. The Department recommends modification of Condition 86 to require pre-construction surveys for threatened, endangered and sensitive wildlife species as recommended by ODFW.
"ODFW recommends that the Applicant address any changes in acreage and habitat classifications that will arise from changing the wind farm layout to the proposed amended layout. The habitat mitigation plan for the project will need to be adjusted to show any changes in impacts to habitat quantity or quality (categorization) that will arise from the proposed amendment."	[5] The certificate holder provided a habitat assessment for the SFN site, including the areas proposed to be added by this amendment. In the present order, Table 3 shows the "typical layout" habitat impacts and Table 4 shows the "maximum" habitat impacts. Condition 29 requires the certificate holder to provide a habitat assessment based on the final design configuration before beginning construction. The *Habitat Mitigation Plan*, which is incorporated in Condition 85, describes how the final size of the habitat mitigation area is determined based on the final design habitat assessment.
Todd Hesse, Oregon Department of Environmental Quality (email)	
"The proposed amendment does not raise any water quality issues for the Department of Environmental Quality if the conditions of the construction permit are met."	
Public Comments	
Johnson Meninick, Confederated Tribes and Bands of the Yakama Nation (letter)	
"Although this project is located on private land, the proposed wind turbines are going to be connected to Bonneville Power Administration (BPA) transmission lines and substations. Furthermore, the power generated from the wind turbines is going to be used by the general public. Therefore, we ask that you follow federal guidelines outlined in the National Historic Preservation Act (NHPA) and consult with Tribes (the Yakama, Confederated Tribes and Bands of the Warm Springs, Confederated Tribes and Bands of the Umatilla, and Nez Perce) in order to be in compliance with the Native American Religious Freedoms Act."	[6] BPA, as a federal agency, may have obligations under the NHPA and the American Indian Religious Freedoms Act. The Siting Council is not a federal agency, and the project is not funded in whole or in part under the direct or indirect jurisdiction of a federal agency. Therefore, those laws do not directly apply. Nevertheless, the certificate holder has conducted surveys for cultural resources for the previously-approved site (*Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), pp. 118-122). The cultural resource surveys were conducted in consultation with the State Historic Preservation Office (SHPO), and with the two tribes identified by the Commission on Indian Services, specificallythe Confederated Tribes of Warm Springs and the Confederated Tribes of the Umatilla Indian Reservation. Conditions 43, 44 and 45 ensure protection of cultural resources, including additional cultural resource surveys in any areas that would be disturbed by construction that were not previously surveyed. The certificate holder responded to this comment, in part, as follows: "While we sympathize with the concerns of the Yakama, we must point out that construction and

Comment	Response
	operation of SFN will not in any way change Tribal access to any lands to which the Tribes now have access. The site of SFN is privately owned and has been in the hands of the current landowners since 1918. The land is fenced in part, posted against trespass, and has not been used by Native Americans within the memories of four generations of the current landowners' family."[1]
"Please have a professional archaeologist or Tribal representative survey access roads, staging areas, proposed tower locations for cultural material and generate a report to be reviewed by all interested parties."	[7] The certificate holder has agreed to provide to the Yakama Nation copies of the cultural resource reports pertaining to the SFN site.
Marisa Meyer/Gary Miller, U.S. Fish and Wildlife Service (e-mail and letter)	
"Consistent with the Guidelines [2008 Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines], the Projects should provide information on the available data on wildlife impacts associated with existing wind projects and activities within the general area of the Projects and the anticipated cumulative impacts of the Projects. The Projects' cumulative impacts assessment should include information on previous habitat loss, fragmentation, degradation, wildlife displacement and mortality data from adjacent wind projects, and an estimation of the additional cumulative impact of the proposed Project on a limited number of key species (i.e., ferruginous hawk, grasshopper sparrow) that could be adversely affected by additional mortality or are highly sensitive to disturbances or habitat loss."	[8] The Guidelines are intended to be "voluntary" and "do not in any way supersede or delegate current regulation at the state and federal level" (Guidelines, p. 4). The Guidelines address "five sequential phases." The first phase, "Macrositing," occurs before a developer applies for a permit from the siting authority and is intended to "identify conflicts that may make a project prohibitively difficult to permit from a wildlife perspective before significant investment is made by project developers" (Guidelines, p. 8). SFN is well beyond this phase. The Council has already issued a permit (the site certificate), and the certificate holder has made significant investment in the project. The Guidelines do not directly address the site certificate process or site certificate amendments, although the activities described under the second phase, "Pre-Project Assessment," seem applicable to permitting or amendment of a permit (Guidelines, pp. 10-13). The other three phases discussed in the Guidelines, "Micrositing," "Construction" and "Operational Monitoring," apply only after a permit has been issued. The certificate holder has provided information on the cumulative wildlife impacts relevant to SFN that is consistent with the "Pre-Project Assessment" recommendations in the Guidelines. A cumulative impacts analysis was included in the site certificate application for the Shepherds Flat Wind Farm (WEST, *Avian and Bat Cumulative Impacts Analysis, Shepherds Flat Wind Project, Gilliam and Morrow Counties, Oregon,* March 2007). The Council has previously addressed the cumulative impacts of the facility (*Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), pp. 79-85, and *Final Order on Amendment #1 for the Shepherds Flat Wind Farm* (September 11, 2009) pp. 40-41). The proposed amendment does not add any new wind turbines, transmission lines or other components that could have an adverse effect on wildlife. The amendment proposes an alternate route for the 230-kV interconnection transmission line. If the certificate holder selects Option B for construction, the length of the

[1] Email from Patricia Pilz, January 2, 2010.

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	transmission line would be greater for SFN but the length of the transmission line for SFC would be reduced. Under the typical layouts proposed, the cumulative length of 230-kV transmission lines for SFN, SFC and SFS would decrease under Option B.[2]
"Specifically, we recommend ODOE collaboratively design, fund, and implement cumulative impact analysis for the Columbia Plateau Ecoregion and establish a central data repository for bird, bat and habitat monitoring data collected from wind development sites."	[9] See response [3] above. The resources necessary to implement the cumulative analysis and central data repository recommended by the USFWS are currently unavailable to ODOE.
"the Service recommends complete surveys for birds, bats, and other wildlife species and their habitats be implemented (as outlined in the Guidelines) for portions of the new amended site boundaries that have not been previously surveyed."	[10] All but 8.8 acres of the transmission corridor that would be added to the SFN site lies within the previously-approved site boundary of SFC, which has been surveyed for sensitive, threatened and endangered species as described in the *Final Order on the Application for the Shepherds Flat Wind Farm* (July 25, 2008), pp.90-96 and 98-99. Additional surveys are included in the *Wildlife Monitoring and Mitigation Plan* that is required by Condition 83. Pre-construction raptor nest surveys are required by Condition 88. The Department recommends modification of Condition 86 to require pre-construction surveys for threatened, endangered and sensitive wildlife species in areas not previously surveyed. The entire 8.8-acre corridor segment lies within the site of the County-approved Pebble Springs Wind Project. PPM Energy (Iberdrola Renewables, Inc.) conducted surveys for wildlife species and habitats in 2006 throughout the Pebble Springs site (Pebble Springs Wind Project Conditional Use Permit Application, pp. 29-44).
The USFWS recommends that the certificate holder "conduct a two-survey system to determine presence of Washington ground squirrels in the project areas within 1000 feet of all ground-disturbing activities. The two survey system should include two surveys conducted in a perpendicular pattern during the same year between March 20 to June 1 (this timeframe is when the juveniles are most active). Surveyors should look for burrows, scat, sightings, vocal alarms, and burrows without scat. Surveys should be conducted in all potential habitats."	[11] The Guidelines do not specify the protocol suggested by the comment. Nevertheless, the certificate holder has agreed to conduct a preconstruction survey for WGS using a protocol approved by ODFW in the areas not previously surveyed.[3] The Department recommends modification of Condition 86 to address preconstruction surveys for WGS in suitable habitat.
The USFWS recommends that the certificate holder "conduct two years of pre-project surveys to obtain baseline information on any eagle nests found during raptor nest surveys. Information on eagle nest productivity; use of feeding, roosting, nesting or wintering areas; eagle movements in relation to each proposed turbine location (including an analysis of spatial use in relation to rotor swept zone); numbers of eagles moving through the project area; movements in relation to meteorological conditions; and phenology of movements should be observed and documented. Eagle movement studies should include more intense observations (at least 20 days for two years during nesting season (June	[12] The Guidelines recommend "one full season of raptor nest surveys" (Guidelines, p. 11). The Guidelines do not mention "movement studies." The SFN, SFC and SFS sites lie within the previous site boundary of the Shepherds Flat Wind Farm (SFWF). Two years of raptor nest surveys were conducted within the SFWF site plus a 2-mile buffer in 2003 and 2004 (SFWF Application Supplement, Exhibit P, p. 13). A golden eagle nest was found on a metal power pole near Willow Creek and Rhea Road outside the site boundary.

[2] Request for Amendment #1, Section III, p. 1.
[3] Email from Patricia Pilz, January 2, 2010.

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through early October] when adult eagles and their fledged young are most active). Information on migrating eagles should be collected as part of raptor migration surveys (see next recommendation below)."	A second golden eagle nest was found in 2007 within a 1,000-foot buffer outside the SFWF site boundary (SFWF Application Supplement, Attachment P-5a, p. 5). In addition, avian use surveys were conducted between 2002 and 2004. There was only one sighting of a bald eagle. Golden eagles were observed with relatively low frequency – less than 6 percent of all surveys (SFWF Application, Attachment P-1, Table 6). The 8.8 acre Option B transmission corridor between the SFC site boundary and the BPA Slatt substation lies within the site of the Pebble Springs Wind Project. In 2006, PPM Energy conducted a raptor nest survey of the Pebble Springs site and a 2-mile buffer. No eagle nests were found (Pebble Springs Wind Project Conditional Use Permit Application, p. 33). In discussing the potential impact of the facility on golden eagles, PPM Energy noted: "no eagle fatalities have been documented at any of the completed modern wind farms in the Pacific Northwest. Based on relatively low use of the site by golden eagles and the lack of eagle mortality at existing Pacific Northwest wind farms, it is unlikely Pebble Springs would have any significant impact on golden eagle populations in the area" (Pebble Springs Wind Project Conditional Use Permit Application, p. 39). The same can be said for SFN.
"Prior to "micrositing" the projects' turbines, information collected above on eagle migration and movement data should be analyzed to develop a quantitative risk assessment of the likelihood of incidental take of bald and golden eagles (including disturbance, disruption, injury, and death) (16 V.S.C. 668-668c; 50 CFR Part 22; and National Bald Eagle Management Guidelines). If the quantitative risk assessment suggests that incidental take of eagles is likely, the applicant should employ "micrositing" measures for the projects' turbines to fully avoid any incidental take of eagles. If the risk assessment suggests that incidental take of eagles is not likely, but important eagle feeding, roosting, nesting or wintering areas are nearby or migratory eagles frequent the project areas, then monitoring of eagle nests and any turbine-related injury or mortality is recommended throughout the life of the projects to periodically reassess risk to eagles as protected under the BGEPA."	[13] The Guidelines do not mention "eagle migration" studies. Based on the available fatality data for other wind energy facilities in the region, the risk to eagles from these facilities appears to be low. (WEST, *Avian and Bat Cumulative Impacts Analysis, Shepherds Flat Wind Project, Gilliam and Morrow Counties, Oregon,* March 2007 (SFWF Application Supplement, Exhibit P, Attachment P-6, p. 16)). Condition 87 requires specific micrositing measures to reduce the risk of turbine-related injuries to avian species. The certificate holder is required to conduct raptor nest monitoring for the life of the facility, as described in the *Wildlife Monitoring and Mitigation Plan* (WMMP) that is incorporated in Condition 83. Additional mitigation may be required if the analysis of nesting data indicates a reduction in nesting success or nest usage by Swainson's hawks, golden eagles, ferruginous hawks or burrowing owls. Under the terms of the WMMP, if the fatality monitoring shows more than 0.09 raptor fatalities per megawatt of facility capacity, additional mitigation may be required.
"Conduct two years of bat acoustic surveys and/or sampling using a combination of Pettersson bat detectors and AnaBat bat detectors. Surveys should be designed to determine bat migratory patterns and any patterns in local movements through the project areas. The hoary bat *(Lasiurus cinereus)* and silver-haired bat *(Lasionycteris noctivagans)* appear to be at the greatest	[14] The Guidelines recommend bat surveys "using best available standards if determined to be necessary after consultation with resource agencies." The Council has not required bat acoustic surveys for

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risk from collision with wind turbines and other turbine-associated mortalities in the Pacific Northwest, and should therefore be the main bat species surveyed. Information on the migratory and local movements of silver-haired and hoary bats are required information for the micrositing phases of the projects. The use of AnaBat is a good approach for long-term monitoring of bat activity levels and does achieve a general understanding of general bat activity. However, with the use of AnaBat there is a loss of signal resolution, limiting species discrimination to species groups (e.g., 50k Myotis, 40k Myotis, etc.) or genus level identification. Additionally, the standard for collecting acoustic bat data in the Pacific Northwest (i.e., Oregon bat grid effort, etc.) is primarily time expansion data (collected with Pettersson detectors); therefore, it is desirable to maintain consistency in acoustic data collection methods whenever possible. The Service recognizes the cost and skill acquisition to convert from AnaBat detectors to Pettersson detectors may be more than a small inconvenience; however, funding for the conversion could be built in to the projects' funding or into future projects. Therefore, we recommend a combination of both the Pettersson bat detectors and AnaBat detectors be used to conduct the pre-project bat acoustic surveys."	any previous wind project due to the relatively low fatality rate for bats in the region (1.43 per MW per year).[4] Although most reported fatalities of bats at wind projects in the region have been fatalities of hoary bats *(Lasiurus cinereus)* and silver-haired bats *(Lasionycteris noctivagans)*, neither of these species are listed as threatened or endangered. The fatalities occur primarily during migration in August and September. These species are not resident in the project area, and they are not listed as Strategy Species in the region (ODFW, *Oregon Conservation Strategy* (2006), Columbia Plateau Ecoregion, p. 163). The certificate holder is required to conduct fatality monitoring, as described in the *Wildlife Monitoring and Mitigation Plan* (WMMP) that is incorporated in Condition 83. If the fatality monitoring shows more than 2.5 bat fatalities per megawatt of facility capacity, additional mitigation may be required.
"The Service recommends a dedicated technical advisory committee (TAC) be established, for each of these three projects, to review monitoring results and make recommendations regarding any additional mitigation and monitoring requirements. Members of the TAC should include representatives from (1) Morrow or Gilliam County; (2) the applicant; (3) landowner within the Project boundary; (4) ODFW, (5) the Service; and (6) non-vested member of the general public. Additionally, a non-vested, non-voting individual should be appointed to take notes at TAC meetings."	[15] The certificate holder may establish a TAC but is not required to do so. Condition 83 requires the certificate holder to implement the *Wildlife Monitoring and Mitigation Plan*. Under the Plan, the certificate holder must report the wildlife monitoring data and analysis to the Department. Although not explicit in the Plan, the information reported to the Department is a matter of public record. Any local government, landowner, state agency, federal agency or member of the public may comment on the monitoring reports and make recommendations to the Council. Authority to require any additional mitigation or monitoring lies with the Council, subject to the terms of the site certificate.
"The Service recommends the ODFW Habitat Mitigation Policy, as outlined in the Guidelines, be implemented."	[16] The ODFW habitat mitigation policy (specifically OAR 635-415-0025) is incorporated in the Council's Fish and Wildlife Habitat Standard.
"Any changes to the habitat classifications and/or acreages from the new site boundaries will need to be addressed by the applicants. In addition, the mitigation plans for the Shepherds Flat Central, Shepherds Flat North, and Shepherds Flat South Wind Projects will have to be updated with the new information from the change in the site boundaries."	[17] The certificate holder has provided a revised habitat assessment of the SFN site, including the areas that would be added by this amendment (Tables 3 and 4 in the present order). Under the terms of the *Habitat Mitigation Plan*, the size of the required mitigation area will be determined based on the final design configuration of the facility. Condition 29 requires the certificate holder to provide a habitat assessment based on the final design configuration before beginning construction. The certificate holder has identified an area that would accommodate the habitat mitigation area

[4] WEST, *Avian and Bat Cumulative Impacts Analysis, Shepherds Flat Wind Project, Gilliam and Morrow Counties, Oregon,* March 2007, p. 12.

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	requirements of all three of the Shepherds Flat facilities. ODFW has approved the suitability of the area (*Final Order on the Application for the Shepherds Flat Wind Farm*, July 25, 2008, p.111).
Leslie Nelson, The Nature Conservancy (email and letter)	
"Because of the extensive macrositing modifications, we feel strongly that these changes should undergo the same level of review and scrutiny as would be required under a new application, including public meetings and sufficient comment period."	[18] The amendment process follows the rules adopted by the Siting Council, including opportunities for public comment on the amendment request as received and a separate comment period on the Department's Proposed Order. The process includes opportunity to request a contested case and to seek judicial review.
"We request that the Oregon Energy Facility Siting Council work with the Certificate Holder to ensure that all areas that are added to the footprint of any of the three projects be thoroughly assessed for impacts to habitat and wildlife resources. Habitat and wildlife surveys in new areas should be done to the same standards as If this were a new project."	[19] The areas proposed to be added to the SFN by this amendment must comply with the same standards as were applied to the previously-approved site
"Use of environmental assessment data from the proposed Saddle Butte Wind Park in the amendment process is not appropriate for determining the Shepherds Flat subproject impacts. Saddle Butte Wind Park has not undergone Oregon Energy Facility Siting Council review nor has it been approved."	[20] Except for approximately 8.8 acres, the land that would be added to the SFN by this amendment is within the previously-approved site boundary of SFC. None of the land proposed to be added to SFN was included in the proposed Saddle Butte Wind Park.
"All portions of the subprojects that indicate recent Washington ground squirrel activity, even those where no squirrels were observed in the current year, should be classified as Habitat Category 1 and no construction activities should occur within the standard buffer for that habitat category."	[21] The Council will follow ODFW guidance in characterizing habitat essential to WGS as Category 1. Condition 86 requires avoidance of impact on Category 1 habitat. The certificate holder's classification of habitat has been reviewed by ODFW. Condition 29 requires a pre-construction habitat assessment based on the final design configuration. The certificate holder must consult with ODFW in making this assessment. Based on ODFW recommendations, the Department proposes a revision of Condition 86 to require a pre-construction survey for WGS in areas of suitable habitat on lands outside the previously-approved SFN, SFC and SFS sites that lie within 1,000 feet of any area potentially disturbed by facility construction. If any Category 1 WGS habitat is found, the revised condition would require an additional 1,000-foot exclusion buffer beyond the Category 1 area during construction.
"If the Certificate Holder had followed the Voluntary Wind Siting Guidelines for the Columbia Plateau in Oregon (as developed by ODFW, DOE, USFWS, RNP, and other groups including The Nature Conservancy) some of our concerns with these amendments would have been alleviated. The Guidelines specifically point out that all macrositing should be done in the first stage of project development, prior to an application being submitted. The Guidelines do allow for minor changes in siting, but adding several thousand new acres to the Central and South Projects is not minor."	[22] See response [8] above regarding the Guidelines. The Guidelines "do not in any way supersede or delegate current regulation at the state and federal level." The Guidelines do not directly address the site certificate process or site certificate amendments. The amendment process follows the rules adopted by the Siting Council. The rules allow for the expansion of the site boundary of any energy facility by amendment. The Council has previously approved site-expansion amendments for Klondike III, Leaning Juniper II and the

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	Stateline Wind Project.
"This request would expand the Shepherds Flat North by 1,167 acres. The Certificate Holder contends that the expansion property and new transmission corridor is equivalent to the previously approved site. This assertion disregards the fact that the previous corridor parallels an existing 230kv transmission corridor rather than crossing previously undisturbed lands. Although the majority of this requested expansion lies within the original project area approved by EFSC, we are not convinced that the environmental and land use concerns have been thoroughly evaluated under the earlier consideration."	[23] The proposed amendment would expand the SFN site by approximately 1,161 acres. All but 8.8 acres of the proposed expansion area lie within the previously-approved SFC site boundary. The Council approved the SFC site based on findings of compliance with Council standards (*Final Order on Amendment #1 for the Shepherds Flat Wind Farm*, September 11, 2009). The entire 8.8 acres lying outside the previously-approved SFC site lies within the site boundary of the County-approved Pebble Springs Wind Project. In response to this comment, the certificate holder states, in part: "TNC states that the previous corridor is preferable because it parallels an existing 230kV transmission corridor rather than crossing previously undisturbed lands. The previous (approved) corridor parallels an existing BPA 500kV transmission corridor for most of its length. The alternate corridor parallels an existing 500kV transmission corridor for its entire length as well (PGE Boardman Coal Plant to Slatt). The alternate corridor was selected for this very reason."[5]

[5] Email from Patricia Pilz, January 2, 2010.