

# Olympic Peninsula Transmission Line Reinforcement Project

## Finding of No Significant Impact (FONSI)

### and Floodplain Statement of Findings

DOE/EA-1576

## Summary

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The Bonneville Power Administration's (BPA) announces its environmental findings on the Olympic Peninsula Transmission Line Reinforcement Project. The project involves upgrading about 14.5 miles of an existing single-circuit, 115-kilovolt (kV) transmission line to a double-circuit 230-kV line between BPA's Olympia and Shelton substations on the Olympic Peninsula.

BPA has prepared an environmental assessment (DOE/EA-1576) evaluating the proposed project and its alternative. Based on the analysis in the EA, BPA has determined that the Proposed Action is not a major federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969. Therefore, the preparation of an environmental impact statement (EIS) is not required and BPA is issuing this FONSI for the Proposed Action. The Proposed Action is not the type of action that normally requires preparation of an EIS and is not without precedent.

The comments received on the Preliminary EA and responses to the comments are in the Revision Sheet for the EA. Minor changes to the Preliminary EA, due to comments and any refinements or changes in the project, are underlined (text additions) or struck through (deleted text).

Attached is a Mitigation Action Plan (MAP) that lists all of the mitigation measures that BPA is committed to implementing.

A Floodplain Statement of Findings is also included in this FONSI. Impacts to floodplains and wetlands will be avoided where possible and minimized where there is no practicable alternative.

## Public Availability

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This FONSI will be mailed directly to interested parties, a notification of availability will be mailed to other potentially affected parties, and the FONSI will be posted on BPA's Web site.

## Proposed Action

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BPA is proposing to remove most of its existing single-circuit Olympia-Shelton No. 1 115-kV transmission line (structures and conductor) from Olympia to Shelton substations on the Olympic Peninsula. The first mile of the line starting from Olympia Substation and the last 0.5 mile into Shelton Substation would not be removed. BPA is proposing to replace the last 14.5 miles of this line into Shelton Substation with a double-circuit 230-kV line on lattice steel towers (average height 120 feet). The double-circuit 230-kV line will connect with an existing line about 6 miles from

Olympia Substation. Most work would be completed on existing right-of-way. Other changes would occur at the existing substations, inside the substation yards.

The proposed construction would start in the summer 2008 and continue through fall 2009. Details of the Proposed Action are presented in Chapter 2 of the EA.

## **Alternative**

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The No Action Alternative assumes that BPA would not remove and replace the transmission line and would continue to operate and maintain the existing transmission line. Construction activities associated with the project would not occur, and the reliability concerns that prompted the proposal for action would continue to be of concern. Maintenance activities would continue within the corridor for the existing line. The No Action Alternative could result in loss of reliable power on the Olympic Peninsula.

## **Significance of Potential Impacts of the Proposed Action**

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To determine whether the Proposed Action or the alternative has the potential to cause significant environmental effects, the potential impact of each alternative on human and natural resources was evaluated. This impact analysis is in Chapter 3 of the EA and is summarized for the Proposed Action below. To evaluate potential impacts from construction, operation, and maintenance activities, four impact levels were used—high, moderate, low, and no impact. These impact levels are based on the considerations of context and intensity defined in Council of Environmental Quality (CEQ) regulations (40 CFR 1508.27). High impacts could be considered significant impacts, while moderate and low impacts are not. The Proposed Action would have no significant impacts.

The following discussion provides a summary of the Proposed Action's potential impacts and the reasons these impacts would not be significant.

### **Land Use and Transportation**

Impacts to land use and transportation would be low-to-moderate.

- Placement of transmission structures and roads would require a minor amount of new right-of-way (about 6.5 acres).
- Construction and maintenance activities would cause only brief, temporary interruption of land use activities and traffic on local roads and highways.

### **Soils and Geology**

Impacts to soils would be low-to-moderate.

- Ground disturbing activities (grading, road building, structure building) would expose soils to rain, but erosion would be minor with the use of Best Management Practices (BMPs) for controlling erosion and timing of the disturbance.
- Disturbed areas would be revegetated after construction.

- Removal of topsoil would be limited to tower or pole sites and new spur roads.
- Existing structures would be cut at the ground surface to minimize soil disturbance.

## **Vegetation**

The impacts to vegetation would be low to moderate.

- About 15 acres of vegetation would be removed permanently. About 10 acres of trees would be cleared for danger trees.
- Temporary impacts would be mitigated by revegetating disturbed areas with seed suitable for the site conditions and land use. Native seed would be used where appropriate.

## **Fish and Wildlife**

Impacts to fish and wildlife would be low to moderate.

- No impacts to federally listed threatened or endangered species are expected.
- Direct impacts would include loss of foraging habitat and ground nesting habitat around the existing structures.
- Existing structures would be cut at the ground surface to minimize soil disturbance.
- When working near or next to water bodies, disturbance would be limited to the minimum necessary.
- Disturbed areas would be revegetated after construction.
- Tensioning sites would not be located within 50 feet of streams or wetlands.
- Removal of forest habitat will be limited to those trees that would interfere with transmission lines or those cut to create access roads.

## **Water Quality**

Impacts to water quality would be low to moderate.

- Vegetation removal and soil disturbance would increase wind and water erosion rates, which could increase sediment deposition in streams, but impacts would be temporary.
- Tensioning sites would not be located within 50 feet of streams or wetlands.
- Construction would occur during the dry season and implementation of BMPs would reduce the potential for erosion.
- Existing structures would be cut at the ground surface to limit soil disturbance.
- Vegetative buffers would be retained where possible to prevent sedimentation into water bodies.
- A Stormwater Pollution Prevention plan would be prepared and implemented, addressing measures to reduce erosion and runoff and stabilize disturbed areas.

## **Wetlands**

Impacts to wetlands would be low.

- Most structures would be built outside of wetlands.
- Existing structures would be removed at the ground surface to reduce soil disturbance.
- No tensioning sites would be located within wetlands.
- Limited road construction or improvement would take place in wetlands.
- Any construction within wetlands will be designed to minimize impacts and BPA will coordinate with the Army Corps of Engineers to obtain appropriate permits and comply with any mitigation required by the Corps.
- Erosion control measures to avoid sedimentation of wetlands and streams will be used.
- Disturbed areas will be revegetated.

## **Floodplains**

Impacts to floodplains would be low to moderate.

- All streams and associated floodplains would be spanned; several existing and proposed structures are within floodplains.
- About 6 acres of floodplains would be impacted temporarily from construction activities. About 1 acre of floodplain would have permanent impacts from removal of existing structures or installation of new structures.
- Incremental amounts of sediment deposition in the floodplain from soil erosion from disturbed areas could occur.
- Disturbed areas will be revegetated.
- Erosion control measures will be used to avoid sedimentation of floodplains.
- Flood storage capacity would not change.

A Floodplain Statement of Findings is including in this FONSI, below.

## **Visual Quality**

Impacts to visual quality would be low.

- Construction activities (trucks, dust) would have short-term, low visual impacts on residents, recreationists and motorists.
- The new structures (towers or steel poles, conductors, etc.) would have a low to moderate visual impact on a few residents and others. However, the existing lines and other lines in BPA's corridor have already impacted the area visually.

- Motorists would have views of the lines along local roads and highways 8, 101 and 108 where the lines cross these highways. These visual impacts would be low because commercial development and the water and mountains visible in the landscape would continue to dominate the visual setting.
- Non-lustrous conductors would be used.

## **Air Quality**

Impacts to air quality would be low.

- Minor increases in emissions would be temporary, confined to the immediate vicinity, and air quality would not be perceptibly affected.

## **Socioeconomics**

Impacts to socioeconomics would be low.

- Money coming into the area (through the purchase of goods, employing local workers, non-local workers paying for lodging and food) would increase jobs or spending in the county during the construction period.
- A new transmission line could create a more reliable system, which would be a positive impact, which could contribute to growth.

## **Cultural Resources**

No impacts are expected.

- No cultural resources were found during site surveys.
- Monitoring would occur during construction and mitigation measures are in place if resources are found during construction.

## **Public Health and Safety**

Impacts to public health and safety would be low.

- The electric fields of the proposed transmission line would be at the same levels as the electric fields emitted at the eastern edge of the transmission line corridor with the existing transmission lines.
- The magnetic fields would be less than what is currently measured at the eastern edge of the transmission line corridor with the existing transmission lines.
- Radio-interference and other EMI (electromagnetic interferences) would be less than what is currently experienced from the existing transmission lines.
- Before construction, the contractor will prepare a safety plan to minimize potential health and safety risks.

## **Noise**

Impacts to noise levels would be low to moderate.

- Construction activities would create typical short-term construction equipment noise impacts. These impacts would be moderate, consistent with state noise regulations, and would be limited to daylight hours.
- Long-term corona noise from the lines would remain the same as the existing line.

## **Floodplain Statement of Findings**

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This Floodplain Statement of Findings was prepared in accordance with 10 C.F.R. Part 1022. Notice of floodplain and wetlands involvement was included in the letter sent to the project mailing list announcing the availability of the Preliminary EA February 15, 2008. An assessment of impacts to floodplains and wetlands is in Chapters 3 and 4 of the EA. No comments were received relating to impacts to floodplains.

BPA is proposing to rebuild its existing Olympia-Shelton No. 1 transmission line in the existing right-of-way that crosses 100-year floodplains of Black River, McClain Creek, Swift Creek, Perry Creek, Gosnell Creek, Kennedy Creek, Skookum Creek, Coffee Creek, and Goldsborough Creek. Construction activities within floodplain areas would be temporary and localized, only minimally altering floodplain functions. Impacts from structure removal and installation are expected to be low to moderate. Although the proposed transmission line would span all streams and associated floodplains, there could be about 1 acre of permanent impacts to floodplains associated with the removal of existing structures, installation of new structures, and proposed access road construction. The primary direct impacts on floodplains are expected to result from soil compaction and removal of vegetation, leading to possible subsequent erosion. Drilling holes that would support new structures would result in the deposition of approximately 100 cubic yards of fill covering about 100 square feet. Indirect impacts on floodplains are expected to be low and limited to incidental amounts of sediment deposited in the floodplain due to soil erosion from construction activities near the floodplain. Improvements to existing roads are expected have a low to moderate impact on floodplain functions because only limited road improvements are planned in and near or within floodplains. Operation and maintenance is expected to have a low impact on floodplains.

***Determination:*** Based on the information in the EA, as summarized here, BPA determines that the Proposed Action is not a major federal action significantly affecting the quality of the human environment within the meaning of NEPA, 42 U.S.C. 4321 *et seq.* Therefore, an EIS would not be prepared and BPA is issuing this FONSI for the Proposed Action.

Issued in Portland, Oregon.



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3/27/08  
Date