Midway-Benton No. 1 Transmission Line Rebuild Project

U.S. Department of Energy

Finding of No Significant Impact (FONSI) and Wetland and Floodplain Statement of Findings
DOE/EA-1912

Summary

Bonneville Power Administration (BPA), in coordination with the U.S. Department of Energy-Richland (DOE-RL), announces its environmental findings on the Midway-Benton No. 1 Transmission Line Rebuild Project (Proposed Action). The Proposed Action would replace the approximately 28.2-mile-long, 115-kilovolt (kV) Midway-Benton No. 1 transmission line and approximately 11 miles of the 115-kV Benton-Othello No. 1 transmission line between the existing Midway and Benton Substations. All of the Proposed Action would be located on the Hanford Site in Benton County, Washington.

BPA, in coordination with DOE-RL, has prepared an environmental assessment (EA) (DOE/EA-1912) evaluating the Proposed Action, Rebuild-in-Place Alternative, and No Action Alternative. Based on the analysis in the EA, BPA and DOE-RL have 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 and DOE-RL are issuing this Finding of No Significant Impact (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 included in the EA Revision Sheet. The Revision Sheet also identifies changes made to the Preliminary EA.

Attached is a Mitigation Action Plan that lists all of the mitigation measures that BPA and its contractors are committed to implementing. Wetland and floodplain findings are also included in this FONSI. No wetlands or floodplains would be impacted under the Proposed Action.

Public Availability

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 Website www.bpa.gov/go/MidwayBentonRebuild.

Proposed Action

Under the Proposed Action, BPA would rebuild the Midway-Benton No. 1 transmission line within the existing right-of-way (ROW), except for an approximately 14.5-mile-long reroute. The transmission line would be relocated south of the existing line ROW to avoid sensitive cultural resources. BPA would remove the corresponding segment of the existing Midway-
Benton No. 1 transmission line. The entire Benton-Othello No. 1 transmission line would be rebuilt within the existing ROW.

The Midway-Benton No. 1 and Benton-Othello No.1 transmission lines were originally built in the 1940s. In general, wood poles for transmission lines are expected to have a service life of 55 to 60 years, at which point they are usually replaced due to age, rot, and other deterioration. Most of the structures on the Midway-Benton No. 1 and Benton-Othello No. 1 transmission lines now exceed their service life. The poor condition of the existing transmission lines creates risks to public and worker safety and may lead to outages that would adversely affect power deliveries to BPA’s customers in eastern Washington. Further, the existing conductors on both transmission lines do not meet current BPA standards. The existing conductors on Midway-Benton No. 1 and Benton-Othello No. 1 transmission lines are made from copper, and the hardware for this type of conductor is no longer available.

The proposed construction would begin in October 2012 and continue through April 2013. Details of the Proposed Action are presented in Chapter 2 of the EA.

**Rebuild-in-Place Alternative**

Similar to the Proposed Action, the Rebuild-in-Place Alternative would replace aging BPA infrastructure that exceeds its service life and no longer meets BPA standards. Under the Rebuild-in-Place Alternative, BPA would rebuild within the existing ROWs for both the Midway-Benton No. 1 and Benton-Othello No. 1 transmission lines.

Construction of the Rebuild-in-Place Alternative would begin in October 2012 and continue through April 2013. Details of the Rebuild-in-Place Alternative are presented in Chapter 2 of the EA.

**No Action Alternative**

The No Action Alternative assumes that BPA would not rebuild the Midway-Benton No. 1 transmission line or the 11 miles of the Benton-Othello No. 1 transmission line and would continue to operate and maintain the existing transmission lines. Construction activities associated with the other alternatives 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 ROWs for the existing transmission lines.

Because of the condition of the transmission lines, it is likely that the No Action Alternative would require more disruptive and frequent maintenance activities within the ROWs than under the other alternatives. Given the poor condition of some of the roads, it is possible that the road work proposed under the Proposed Action would be funded and carried out as an operation and maintenance project in the future, independent of rebuilding the transmission lines.

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

To determine whether the Proposed Action, Rebuild-in-Place Alternative, or the No Action Alternative has the potential to cause significant environmental effects, the potential impacts of each alternative on human and natural resources was evaluated and presented in Chapter 3 of the
EA. The potential impacts associated with the Proposed Action are summarized 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 regulations (40 Code of Federal Regulations 1508.27). High impacts could be considered significant impacts, if not mitigated, 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.

- No direct conflicts with land use plans and policies would occur for the transmission lines would be located within or adjacent to existing utility corridors.
- Most of the project would cross lands designated for Conservation/Mining where the uses are generally compatible. Where the project would cross lands designated for Preservation, which has higher levels of resource protection, the actions would be limited to rebuilding in existing right-of-way or, in the case of the Proposed Action, the line would be removed and the land would be restored.
- As the project area and the Hanford Site are closed to the public, there would be no direct or indirect impact on residential, recreation, or agricultural lands.
- Construction traffic on Hanford Site roads would be temporary in duration and would be minor when compared to current daily Hanford traffic levels.

**GEOLOGY AND SOILS**

There would be no impacts to geology and impacts to soils would be low to moderate.

- Although soils would be disturbed during construction, resulting in some loss of productivity and damage to cryptogamic crusts, most of the project would involve rebuilding existing facilities (structures replaced in existing locations, improvements to existing access roads) where soils have already been disturbed.
- The use of mitigation measures and Best Management Practices (BMPs), including minimization of workspaces and revegetation, would help reduce erosion of sandy soils prone to wind, minimize soil compaction, and restore soil productivity and cryptogamic crusts.

**VEGETATION**

Impacts to vegetation would be low to moderate.

- Although no plant species listed as threatened or endangered under the Endangered Species Act (ESA) would be impacted by the project, a majority of the vegetation that
would be impacted is high quality shrub-steppe, including some special-status species, that are protected within the Hanford Site and require mitigation for impacts with the goal of no net loss.

- The impacts to vegetation would be mitigated through the implementation of an on-site restoration plan to be developed in coordination with DOE-RL and other interested parties, which would include establishing site-specific avoidance strategies, using native seed mixes and rooted plant materials, cataloging special-status plant species impacted for replacement, and noxious weed control. In addition, if impacts still include long-term or permanent sensitive vegetation loss, off-site vegetation restoration projects would be developed.

**WILDLIFE**

Impacts to wildlife would be low to moderate.

- Although no wildlife species listed as threatened or endangered under ESA would be impacted, some special-status species and habitats protected on the Hanford Site could be impacted.
- During construction most mobile species would temporarily leave the area and mitigation measures restricting construction timing and locations would lessen potential impacts to nesting bird species and snake hibernaculum.
- Long-term habitat impacts would be lessened through mitigation measures to revegetate and restore disturbed areas as described in Section 3.4 of the EA.

**WATER RESOURCES**

No impacts to water resources would occur.

- The project area contains no streams, floodplains, wetlands, vernal pools, or other surface waters and the Columbia River is 1,650 feet (0.3 mile) from the closest project work area (at the Benton Substation).

**VISUAL QUALITY**

Impacts to visual quality would be low.

- Construction-related visual impacts (construction equipment, vegetation removal, and ground disturbance) would be temporary and are common to the Hanford Site.
- Where the lines would be rebuilt in the same rights-of-way, the structures would be similar to the existing structures and in the same locations and views would not change.
- In areas outside of the traditional cultural properties (TCPs) where the line would be relocated under the Proposed Action, the visual quality is already impacted by the existing lattice-steel DOE-RL transmission line and the viewers would be limited to Hanford commuters and workers.
• Where the line would be removed within the TCPs associated with Gable Butte and Gable Mountain under the Proposed Action, views for American Indian viewers would be improved.

CULTURAL RESOURCES

Impacts to cultural resources would range from low to high.
• Minimization measures developed in coordination with the Washington State Historic Preservation Office (SHPO) and four American Indian Tribes (Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes and Bands of the Yakama Nation, Nez Perce Tribe, and Wanapum Band) through the National Historic Preservation Act (NHPA) Section 106 consultation process would reduce the moderate and high impacts associated with TCPs. to a moderate level.

• Impacts to archeological and historic resources eligible for listing on the National Register of Historic Places (NRHP) would be avoided.

• Impacts associated with ground disturbance, worker presence, and transmission line structures located within identified TCPs would be mitigated through coordination as part of the NHPA Section 106 consultation process and the resultant Memorandum of Agreement between BPA, Washington SHPO, Advisory Council on Historic Preservation, DOE-RL, and the consulting tribes for the rebuild project.

• Long-term beneficial impacts would result from removing structures from the topographic highpoints of Gable Butte and Gable Mountain TCPs.

• No adverse effect on built resources would occur as the essential function of the Midway-Benton No. 1 and Benton-Othello No. 1 transmission lines would not be altered.

• Direct impacts to cultural resources may result from possible disturbance of previously unrecorded cultural resources during construction, operation, or maintenance activities; however, BPA has an Unanticipated Discovery Procedure for cultural resources to minimize impacts to unrecorded cultural resources.

SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND PUBLIC SERVICES

Impacts to socioeconomics and public services would be low and positive. No impacts to low-income or minority populations (environmental justice communities) would occur.

• Construction spending through the local procurement of materials and equipment and spending by construction workers would have a small, positive impact on the regional economy.

• The number of workers required to complete the Proposed Action would have a small effect on public services, roads, or utilities during construction.

AIR QUALITY AND CLIMATE CHANGE

Impacts to air quality would be low to moderate.
- Minor increases in emission would be localized and temporary during construction.

- Dust emissions may continue to be generated after construction, due to dry, windy conditions and fine-grained soils, but revegetation measures would help lessen this impact.

- Greenhouse gas emissions from construction, operation, and maintenance activities over the life of the transmission lines would be below U.S. Environmental Protection Agency (EPA) mandatory reporting threshold and would not represent a substantial change from current conditions.

**NOISE, PUBLIC HEALTH, AND SAFETY**

Impacts to noise, public health, and safety would be low.

- Construction activities would result in short-term and intermittent noise impacts as construction progresses along the ROWs and would be limited to daylight hours. No noise sensitive receptors, such as houses or schools, were identified within the study area. Noise associated with helicopter use to install conductors would likely exceed noise thresholds for some receptors, but would generally be less than 10 minutes at each structure and would likely not be in any given line mile for more than 3 hours.

- Traffic noise would not significantly increase over average, daily Hanford traffic noise levels.

- Corona-related audible noise during line operation and periodic noise impacts due to maintenance activities would be similar to those currently experienced. There would be no increases in electromagnetic field (EMF) exposures during operation and maintenance. Maximum EMF at the edges of the ROWs would be similar to existing field levels. The Proposed Action would result in new, properly installed connecting hardware that would reduce any risk associated with aging hardware spark-discharge activity.

- Radio and television performance would not change or could slightly improve.

- Potential safety impacts during construction would be mitigated with standard construction safety procedures.

- There would be no appreciable change in risks to low-flying aircraft.
Determination

Based on the information in the EA, as summarized here, BPA and DOE-RL 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 United States Code 4321 et seq.). Therefore, an EIS will not be prepared and BPA and DOE-RL are issuing this FONSI for the Proposed Action.

Issued in Portland, Oregon and Richland, Washington.

/s/ F. Lorraine Bodi
F. Lorraine Bodi
Vice President
Environment, Fish and Wildlife

December 6, 2012
Date

/s/ Matthew S. McCormick
Matthew S. McCormick
Manager
Richland Operations Office

December 20, 2012
Date