Resource Contingency Program Hermiston Power Project

Record of Decision

On

Hermiston Power Partners Project Integration

Bonneville Power Administration U.S. Department of Energy February 1999

Background

In 1990, the Bonneville Power Administration (BPA) embarked on the Resource Contingency Program (RCP), a program that was designed to complete environmental review and licensing for several combustion turbines in advance of actual needs, so that BPA or another entity could more quickly acquire energy to meet future demands.

In September 1995, BPA completed a Final Environmental Impact Statement (FEIS) on the Hermiston Power Project (HPP), one of three option energy projects in the RCP. The FEIS evaluated the environmental effects of constructing and operating a cogeneration/combined-cycle turbine at the Hermiston site and the effects of constructing transmission lines from the plant site to BPA's McNary Substation, at which point existing transmission facilities would be used to wheel the power to other delivery points. A Record of Decision (ROD) on the FEIS was not issued at that time as a decision to acquire the output of the projects was to be made later if/when BPA needed additional energy and thus chose to exercise its option.

Also in 1995, BPA completed a Final Environmental Impact Statement on its Business Plan (DOE/EIS-0183). The ROD for the Business Plan FEIS states that BPA has chosen to pursue a market-driven approach to its business, which includes transmission system development and operation.

Since the completion of the RCP FEIS in September 1995, and certification of the Hermiston site by the State of Oregon, some changes occurred in the project proposal. These included a change in ownership of the plant, increased generating capacity of the plant, and more detailed information for the transmission line plans. In accordance with the procedural requirements of the National Environmental Policy Act (NEPA), BPA prepared a Supplement Analysis (SA) to the FEIS in January 1999. The Supplement Analysis supported BPA's Determination that there were no substantial changes to the proposal or significant new circumstances or information relevant to environmental concerns.

The manner in which BPA makes decisions has also changed since the completion of the FEIS. The Federal Energy Regulatory Commission (FERC) issued Order Nos. 888 and 889, requiring utilities within FERC's jurisdiction to administratively separate their power marketing and transmission functions, and to provide open access to their transmission systems. As a non-jurisdictional utility, BPA has voluntarily complied with the FERC orders by separating its power and transmission business lines. The Power Business Line (PBL) and the Transmission Business Line (TBL) now make independent decisions on power and transmission issues pursuant to BPA's Standards of Conduct filed with FERC (Docket No. NJ97-7-000).

Pursuant to BPA's Open Access Transmission Tariff, on April 3, 1998, Hermiston Power Partnership came to BPA with a request for Long-Term Firm transmission service under BPA's Open Access Transmission Tariff (Tariff) to integrate the 536 megawatt (MW) output of the proposed HPP gas fired power plant into the Federal Columbia River

Transmission System (FCRTS). In complying with the Tariff, BPA completed system impact and facilities studies, and now BPA's TBL must decide whether to provide transmission service for the HPP.

When BPA is ready to make a decision whether to acquire any power generated by HPP (perhaps as soon as late 1999), it will issue a separate ROD.

Decision

As the Transmission Business Line Senior Vice President for the Bonneville Power Administration, I am making the decision to allow the construction of a 500-kV transmission line from a major new source of generation, the Hermiston Power Project (HPP), to interconnect with BPA facilities at the McNary Substation. This decision will be effective upon its issuance by the Administrator. This decision allows the HPP project to continue forth, and will also enable BPA to later decide whether to exercise its option to acquire as a major resource acquisition a portion of the generation produced from the HPP. If BPA declines to acquire a portion of the resource as a major acquisition, then PBL may then decide whether to purchase the generation as a short-term power purchase.

I have decided to implement the Eastern 500-kV Alternative as described below. The Point of Integration (POI) will be where the project connects to BPA's transmission system. If BPA agrees to own the entire length (23.8 kilometers (14.8 miles)) of the 500-kV line, the POI will be at the plant site in Hermiston, Oregon. If BPA agrees to own only a portion of the line, then the POI is the first physical location where the HPP connects to BPA's transmission system. The Point of Delivery for the energy will be the California-Oregon Border (COB), an inter-regional energy sales hub from which energy is bought and sold between the Northwest and the Southwest.

In the next months BPA will negotiate and sign a Construction, Operation and Maintenance Agreement with the Hermiston Power Partners. This agreement will identify project cost responsibility, construction responsibilities, ownership, and operation and maintenance responsibilities.

A second agreement with the Hermiston Power Partners, the Transmission Service Agreement, is a commercial agreement that will contain transmission rate/tariff references, ownership, operational restrictions/requirements and responsibilities, and maintenance responsibilities.

BPA does not consider this a major transmission facility under the Federal Columbia River Transmission System Act because the line extends a short distance, is in an area where BPA has existing facilities, does not require BPA funding or construction, and will not have a significant impact on the integrated network.

Transmission Alternatives Studied in the EIS

The FEIS evaluated the environmental impacts of two transmission alternatives, the Western 230-kV Alternative, and the Eastern 500-kV Alternative, to connect the project into BPA's McNary Substation. The FEIS also evaluated a No Action Alternative. A preferred transmission alternative was not identified in the FEIS. However, the Supplement Analysis identified the Eastern 500-kV Alternative as the preferred transmission alternative and addressed changes to that alternative since the FEIS was issued.

Western 230-kV Alternative

The Western 230-kV Alternative involves using, for the most part, an existing Umatilla Electric Cooperative Association (UECA) transmission line corridor between the Westland and the McNary Substations. The right-of-way (ROW) generally runs parallel to the eastern boundary of the Umatilla Ordnance Depot from the Westland Substation at the Lamb-Weston potato plant north to the city of Umatilla, then east and north to the McNary Substation. The project would be connected to the UECA line at the Westland Substation by constructing approximately 2.4 km (1.5 miles) of new 230-kV line from the facility site west and then north to Feedville Road, then continuing approximately 3.2 km (2 miles) west along Feedville Road to the Westland Substation at the Lamb-Weston plant.

Eastern 500-kV Alternative

This alternative requires constructing a new 500-kV single-circuit transmission line between BPA's McNary Substation and a new substation to be built on the HPP site. Beginning at McNary Substation, the HPP 500-kV line would use a portion of BPA's existing McNary-Lower Monumental 500-kV line for 1.4 km (0.9 Miles) as it heads east from McNary Substation. This was necessary to terminate the HPP 500-kV line at the proper location within McNary Substation and to avoid transmission line crossovers.

BPA's existing 500-kV McNary-Lower Monumental transmission line (now occupied by the HPP line) would be relocated to the County Road 1231 ROW approximately 200 m (656 feet) east of its present position. The relocated line would be approximately 1.6 km (1 mile) in length and would be constructed on new tubular steel poles or lattice steel towers.

The HPP 500-kV line would follow a short section of new ROW 0.4 km (0.2 miles) between the McNary-Lower Monumental ROW and a junction with BPA's McNary-Roundup 230-kV line corridor. From this point the HPP 500-kV line would proceed southerly and be within existing vacant ROW immediately adjacent to the existing wood pole H-frame McNary-Roundup 230-kV line for a distance of 13.7 km (8.5 miles). Steel towers or poles would be constructed at 304.8 or 365.8 m (1,000 or 1,200 foot) intervals along the eastern one-half of the ROW. This design would be used for 13.7 km (8.5 miles) to the point where the line intersects with Canal Road.

At Canal Road, the HPP 500-kV line would continue south along Canal Road on single-shaft tubular steel poles approximately 1.4 km (0.9 mile) to the intersection with Feedville Road. Pole placement would be along the county road ROW. At Feedville Road the line follows the south side of Feedville Road west approximately 5.1 km (3.2 miles) to a point 0.2 m (0.1 mile) west of the intersection of Hermiston and Hinkel Roads. From this point the line would continue south and slightly west to the facility site. The 500-kV transmission line ROW may be shared with the proposed gas pipeline route between the facility site and Canal Road.

No Action Alternative

The FEIS also discussed the No Action Alternative. Because the No Action Alternative was the no-build alternative, no adverse environmental impacts from the construction and operation of the proposed generation facility nor transmission line construction would occur.

Rationale for Decision

This decision complies with the National Environmental Policy Act, Department of Energy Order 451.1A, Department of Energy NEPA regulations, and BPA's Standards of Conduct. The DOE order and regulations mandate that the Administrator issue the ROD regarding actions covered in the FEIS and Supplement Analysis. However, in compliance with the Standards of Conduct, the Senior Vice President for TBL will make decisions offering or responding to requests for BPA transmission service.

I analyzed the environmental impacts of the three transmission alternatives, how each alternative could meet the need for the project, and the public comments received on the Draft EIS. I then evaluated the alternatives against the project purposes. Project purposes are goals or objectives to be achieved while meeting the need for the project. For this project, BPA used the following purposes to evaluate alternatives:

- Ensure consistency with BPA's statutory responsibilities, including the National Energy Policy Act;
- Ensure consistency with BPA's business plans to pursue a market-driven approach to business, which includes transmission system development and operation;
- Restore and enhance environmental quality, and avoid or minimize potential adverse environmental effects.

The stated need in the FEIS was a sufficient power supply to satisfy regional demand. Implicit in the need to develop sufficient power resources to meet future energy demand is a need for transmission facilities to transport this power. This need for transmission service is evident by the incorporation of various transmission line routes in the alternatives discussed in the FEIS.

The Eastern 500-kV Alternative was specifically chosen as the preferred transmission alternative because of its electrical superiority and reliability. If the Western 230-kV Alternative were chosen, transmission system reliability would be a critical concern, with

potential overloading and transmission system outages. The electricity needs to be transmitted on the 500-kV grid from the McNary Substation to BPA's intertie system. With the current McNary Substation configuration, the 230-kV Alternative would require upgrades such as adding an additional 230/500-kV transformer at McNary; and sooner than planned upgrades to other 230-kV transmission lines. Additional equipment would need to be added to insure that during outages certain equipment, transmission lines, and loads were immediately dropped. The 230-kV Alternative may also not have adequate capacity for the potential increase in generation output of the HPP. With the 500-kV Alternative the HPP would be connected directly to the 500-kV grid bypassing the problems with the 230-kV Alternative.

The Farmland Protection Policy Act (7 USC 4201 et seq.) directs Federal agencies to identify and quantify adverse impacts of Federal programs on farmlands. The Act's purpose is to minimize the number of Federal programs that contribute to the unnecessary and irreversible conversion of agricultural land to non-agricultural uses. Approximately 6.9 ha (17 acres) of prime farmland (based on soil type) would be permanently lost to agricultural production as a result of building the generation facility. However, since this land is committed to urban development in the Umatilla County Comprehensive Land Use Plan, it is not protected under the Farmland Protection Policy Act. A maximum of 29 ha (71 acres) of prime farmland could be temporarily disturbed during construction of the water supply, wastewater, electrical transmission lines, and gas lines. However, soils would be stocked and replaced, and there would be no permanent loss of farmland.

Mitigation

BPA will undertake all practicable means to avoid or minimize environmental harm which pertain to the HPP and the Eastern 500-kV Alternative. Those mitigation measures can be found by individual resource in Chapter 4.0 *Environmental Effects* of the FEIS. BPA's Construction, Operation and Maintenance Agreement, and its Transmission Service Agreement, with the Hermiston Power Partners, will be made contingent upon completion of the mitigation measures defined in the FEIS, and where appropriate, will be included in the construction specifications for the project.

Issued in Vancouver, Washington, on February 19, 1999.

/s/ Mark W. Maher

MARK W. MAHER

Senior Vice President, Transmission Business Line

Because this decision covers proposed actions for which an environmental impact statement was prepared, and because Department of Energy Order 451.1A does not allow me to delegate this decision to the Transmission Business Line (TBL) Senior Vice President, I must independently review the administrative record for this action, including the Final Environmental Impact Statement (FEIS) and Supplement Analysis (SA).

I have independently reviewed the FEIS and SA which formed the basis for the TBL's decision. I concur with the decision reached by the TBL Senior Vice President and with the reasons for the decision. I hereby adopt the decision of the TBL Senior Vice President and issue it as my own.

Issued in Portland, Oregon, on February 19, 1999.

/s/ Jack Robertson_

Jack Robertson, Acting Administrator
And Chief Executive Officer