

# Chapter 2

## Proposed Action and Alternatives

This Chapter describes and compares:

- Agency Proposed Action
- Alternatives to the Proposed Action, including No Action
- Alternatives considered but eliminated from detailed study

BPA proposes to construct a 500-kilovolt (kV) transmission line that would extend approximately 84 miles between the Grand Coulee 500-kV Switchyard, near Grand Coulee Dam, and the Bell Substation, in Mead just north of Spokane. In addition to the transmission line, new equipment would be installed at the *substations* at each end of the new line and at other facilities. BPA is considering two construction alternatives, the Agency Proposed Action and the Alternative Action. Both construction alternatives would remove an existing transmission line and replace it with a new line on existing right-of-way for most of its length. Additional right-of-way would be needed in the first 3.5 miles out of the Grand Coulee Switchyard to connect the new 500-kV *bay* with the existing 115-kV right-of-way.

BPA is also considering the No Action Alternative. NEPA requires Federal agencies to analyze the consequences of taking no action, in this case, continuing to operate the transmission system under present conditions.

This chapter also describes other alternatives, such as burying a new transmission line, that have been suggested but eliminated from detailed study for technical, environmental, and economic reasons.

## How the Alternatives Were Developed

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In developing this EIS, BPA considered a wide range of potential alternatives to solve the problem. This range included alternatives developed by BPA based on its knowledge of transmission line design and possible environmental issues; alternatives considered and presented to the public in a previous process undertaken in the mid-1990s (see EIS History in Chapter 1); and alternatives that were suggested or that responded to concerns raised during the scoping process for this EIS.

## 2 Proposed Action and Alternatives

Development of the alternatives for this project was aided by BPA's participation in the Infrastructure Technical Review Committee (ITRC). This committee was formed in the summer of 2001, at the request of Northwest utilities, to consider how BPA might provide the most cost-effective, reliable service for the region's consumers. The ITRC included individuals from BPA, the Northwest Power Pool (NWPP) Transmission Planning Committee, Operating Committee, and the Northwest Regional Transmission Association (NRTA) Planning Committee. The ITRC evaluated and prioritized transmission projects throughout the Northwest based on whether they would provide appropriate business, technical, and cost-effective solutions to identified problems, and as though only one utility operated the entire system ("single utility" planning concept). In August 2001, the committee released its report, entitled *Upgrading the Capacity and Reliability of the BPA Transmission System*, which is incorporated by reference in this EIS. The report provides the ITRC's conclusions regarding various potential transmission projects throughout the region (including the proposed action and alternatives to it), and identified nine transmission projects (among them the proposed action) as high priority.

In establishing the range of reasonable alternatives to be evaluated in detail in this EIS, BPA assessed whether the alternative solved the problem as identified under Need for Action in Chapter 1, and how well it met other key objectives (listed under Purposes in Chapter 1). Those alternatives that solved the problem and achieved the objectives are evaluated in detail in this EIS. Alternatives considered unreasonable (e.g., those that cost substantially more or had much higher environmental impacts) were eliminated from detailed evaluation.

The remainder of this chapter describes the alternatives that are evaluated in detail, as well as those that were eliminated and why.

### Agency Proposed Action

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#### Location

The proposed action involves removing an existing 115-kV transmission line (Grand Coulee – Bell No. 1 line) and replacing it with a 500-kV transmission line. BPA would construct a single-circuit 500-kV transmission line over most of the route between the terminal at the Bureau of Reclamation's existing Grand Coulee Switchyard and BPA's existing Bell Substation. A double-circuit transmission line would be constructed for short distances where the right-of-way is constrained between corridor mile 73/1 (mile 73, structure 1) and corridor mile 73/4, and between corridor mile 83/1 and corridor mile 83/6 just northwest of Hawthorne Road in the north Spokane area (see Figures 2-1 and 2-2). Combined, the two double-circuit segments amount to slightly less than one mile of transmission line. The Agency Proposed Action would cost about \$152 million (2002 dollars).