

December 2009

Big Eddy-Knight Transmission Project Update Public comment helps refine BPA's proposal

The Bonneville Power Administration is proposing to construct a 500-kilovolt line from BPA's Big Eddy Substation in The Dalles, Ore, to a proposed Knight Substation about four miles northwest of Goldendale, Wash. We completed the initial public scoping period, reviewed the comments we received and are asking for comments on refinements to the project proposal.

BPA is considering three transmission line routing alternatives, two adjacent sites for the proposed substation and a No Action Alternative for the project (see project overview map). These alternatives will be analyzed in the environmental impact statement BPA is preparing for the project. All routing alternatives use a combination of existing BPA transmission line right-ofway and new 150-foot wide right-of-way and would end at one of the proposed substation sites. BPA has not determined a preferred alternative at this time.

We are now inviting comments on the refinements we have made to the project proposal. These refinements are described and displayed in this update. Please note that comments are due on **Jan. 19, 2010.** Contact information is included in the "How you can get involved" section.

Background

In June 2009, we announced our proposal to build a new 500-kilovolt transmission line and substation. The proposed project is needed to increase the electrical capacity of our lines so that we can respond to requests for transmission service in this area.

BPA will prepare both a draft and final EIS prior to making a decision about whether or how to proceed with the project. As part of this process, we sought comment on the project and hosted two public meetings to help us determine what issues we should study in the EIS.

What we heard

Over 400 people commented on the project, including landowners, concerned citizens and interest groups. We also heard from local, state, tribal and federal government agencies. People gave us a wide range of issues and concerns to consider. Some of these include:

• Questions about the underlying need for the project; for example, whether the project is needed for the wind farms in the area, and where the power on a new line would go.



- Questions about the design of the proposed transmission line – how big the towers would be, how much right-of-way would be needed, how close the line could be to existing lines.
- Opinions and data supporting a particular route for the line.
- Concern about the visual impact on views in the Columbia River Gorge National Scenic Area, other recreation areas and homes.
- Concern about how the line would affect farming, such as possible irrigation and aerial spraying disruptions and effects on crops during construction.
- Concern about impacts to natural preserve areas, wildlife habitat and protected animal and plant species.
- Concern about potential human health risks associated with electromagnetic fields.
- Concern that the project would impact property values, the ability to sell land being subdivided and the inherent value of family homesteads.

If you would like to see all the comments submitted or other project information, please visit our project Web site: www.efw.bpa.gov/environmental_services/ Document_Library/Big_Eddy-Knight.

How we are responding

We have used the comments received during the public scoping process and additional studies of the transmission system to help refine our alternatives *(see box)* and shape the scope and content of our draft EIS. The draft EIS will describe the need for the project, the design of the proposed line and substation, and the alternatives considered, as well as address the potential environmental impacts to land use, visual quality, socioeconomics, fish and wildlife, wetlands, water resources, vegetation, soils, health and safety, cultural resources and other issues.

Transmission line alternatives

BPA is still considering the West, Middle and East routing alternatives, as well as the No Action Alternative. Detailed descriptions follow.

Project Refinements

- The northern portion of the West Alternative and Substation Site A have been removed from consideration. The West Alternative now turns east to join the east and middle routes just below the Little Klickitat River.
- A new substation site next to the original Substation Site B has been added. The proposed sites are now called Substation Site 1 and 2.
- The Middle Alternative was moved slightly east along property lines.
- Removal of existing lines and replacement with the proposed line, or use of a different tower type that could accommodate both the existing and proposed line are also being considered.
- Use of a tower type that could accommodate the proposed line and possible future use across the Columbia River is another option being proposed.
- A fiber optic cable on an existing line to BPA's Wautoma Substation is now being considered to meet electrical communication needs.

WEST ALTERNATIVE: This route extends north from Big Eddy Substation within existing vacant BPA right-of-way to the Columbia River. The route then crosses the river and heads west and then north, paralleling BPA's Spearfish Tap 115-kV wood-pole transmission line. The proposed line then angles northeast next to BPA's Chenoweth-Goldendale 115-kV wood-pole line for about 12 miles to a point just south of the Little Klickitat River.

At this point, instead of continuing north on a new right-of-way as originally proposed, the West Alternative now continues to parallel the Chenoweth-Goldendale line by turning east with this existing line. It would then follow the same route as the Middle Alternative to connect with BPA's Wautoma-Ostrander 500-kV line at the proposed Knight Substation *(see project overview map).* This alternative is about 27 miles long.

The northernmost portion of the original West Alternative was eliminated because a section of the route heading to the original Substation Site A would need to be 1,200 feet or more from the existing lattice steel lines and would require the purchase of a new right-of-way containing several homes that would need to be removed. The other proposed project routes would not have this requirement.

MIDDLE ALTERNATIVE: From Big Eddy

Substation, this route extends east and slightly north in existing right-of-way next to BPA's Harvalum-Big Eddy 230-kV lattice steel line for about seven miles before crossing the Columbia River. The route crosses the river just west of the Harvalum-Big Eddy line near Wishram and continues to parallel this existing line for about 1.5 miles before heading north on new right-ofway. The Middle Alternative then heads to the proposed Knight Substation, generally running north for about 15 miles with two jogs east along the way – one for about 1.5 miles along BPA's Big Eddy-Spring Creek 230-kV lattice steel line, and the other for about three miles partially along BPA's Chenoweth-Goldendale 115-kV wood-pole line (see project overview map).

A portion of this route running north/south was moved slightly to the east and is now on property lines to reduce potential impacts to farming. This alternative is about 27 miles long. **EAST ALTERNATIVE:** This route follows the same path as the Middle Alternative for about the first nine miles to a point just north of Wishram where the routes separate. The East Alternative continues east next to BPA's Harvalum-Big Eddy 230-kV lattice steel line and McNary-Ross 345-kV lattice steel line for an additional four miles before turning north. The East Alternative then generally runs north for about 15 miles to the proposed Knight Substation. This alternative is about 29 miles long.

NO ACTION ALTERNATIVE: BPA is considering the No Action Alternative, that is, not building the transmission line and substation.

Other options

In addition to transmission line routing alternatives, BPA is considering various other options. See figure below for existing and proposed tower types.

Transmission tower options

 In some locations, where the proposed line would parallel existing lines, BPA is considering removing the existing line and building double-circuit towers that could accommodate both sets of lines.





Big Eddy-Knight Transmission Project Project Overview



Existing Facilities

Five Mile

- BPA Substations
- **BPA Transmission Lines**

Eliminated From Further Consideration Routing Options to Substation Sites

- Original Portion of West Alternative
- Original Substation Site A



West Alternative

Middle Alternative

East Alternative

Proposed Substation Locations







- BPA is analyzing its transmission system to determine if the existing Chenoweth-Goldendale 115-kV wood-pole line along the West Alternative can be removed, so that the proposed line could then be built in its place. Additional right-of-way width (about 50 feet) would still be required.
- For the West Alternative, BPA is also considering building double-circuit towers for the first five miles (starting at Big Eddy Substation and crossing the Columbia River) to accommodate possible future energy transmission.

Fiber optic cable options

The proposed transmission line would require fiber optic cable for communications among BPA substations. Two options are being considered.

- One option would be for the cable to be strung on the towers of the proposed line from BPA's Big Eddy Substation to the new Knight Substation and then loop back to Big Eddy Substation on the same proposed towers.
- The second option would be to follow the same route to the Knight Substation, but then continue an additional 72 miles using the transmission towers supporting BPA's Wautoma-Ostrander line to end at BPA's Wautoma Substation in northwest Benton County, Wash. (see the fiber optic cable map).

Substation sites

The proposed Knight Substation would require about 14 acres; the fenced electrical yard of the substation would be about five to seven acres. There have been some adjustments and name changes to the proposed locations for Knight Substation.

- Original Substation Site A has been eliminated from further consideration because the portion of the West Alternative that connected to that site has been eliminated.
- Substation Site 1 is a new location on private property adjacent to the original Substation Site B.
- Substation Site 2 is the original Substation Site B and is located on state property.

Both proposed sites are under BPA's existing Wautoma-Ostrander 500-kV transmission line. Depending on the substation site, there are two routing options for the proposed line as it would approach the substation (see project overview map).

Permission to Enter Property forms

Some landowners have received and signed a Permission to Enter Property (PEP) form for property they own that may be affected. If you signed the PEP form and your property has been dropped from further consideration, BPA is releasing the PEP rights on those properties that do not have existing BPA rights-of-way. (Check the project map to see if this includes your parcel.) If you have a question, contact our Realty Specialist (see "Additional contact information" section). If the refinements to the alternatives now affect property you own, you will receive a PEP form by mail in a separate mailing.

What happens next

BPA has begun to prepare the draft EIS for this project. BPA has not determined a preferred alternative at this time. The draft EIS will assess the potential impacts of the project and is expected to be available in spring 2010 for public review and comment. We will hold public meetings at that time for public comment. BPA will then prepare a final EIS that responds to comments received on the draft EIS. Based on the EIS findings and public input, BPA will make a decision about whether or how to proceed with the project. That decision is expected by winter 2010.

Throughout this process we will continue to work with the Washington and Oregon energy facility siting councils, as well as with other federal, state and local agencies, tribes, landowners and interest groups.

Environmental Impact Statement Schedule

Summer 2009

BPA announced proposed project and solicited public input on scope of EIS.

Fall/Winter 2009–10

BPA conducts field work and environmental analysis; prepares draft EIS.

Winter 2009–10 BPA requests input on project refinements.

Spring 2010 BPA issues draft EIS for public review and comment.

Winter 2010 BPA issues final EIS.

Winter/Spring 2011 BPA announces agency decision.

How you can get involved

If you have comments on the project refinements described in this mailing, please submit them to one of the following: BPA online at: *www.bpa.gov/comment;* fax to 503-230-3285; mail to BPA's Public Affairs Office -DKE-7, P.O. Box 14428, Portland, OR, 97293-4428; or phone toll-free at 800-622-4519. Please be sure to reference "Big Eddy-Knight Transmission Project." To ensure that your comments are considered in our analysis, please submit them by **Jan. 19, 2010.** We will post all comments we receive on our project Web site at *www.efw.bpa.gov/environmental_services/ Document_Library/Big_Eddy-Knight/.*

Additional contact information

STACY MASON, Environmental Coordinator, Bonneville Power Administration – KEC-4, P.O. Box 3621, Portland, OR 97208-3621; toll-free telephone 800-282-3713; direct telephone 503-230-5455; or e-mail *slmason@bpa.gov.*

STEVE PRICKETT, Project Manager, Bonneville Power Administration – TNP-3, P.O. Box 61409, Vancouver, WA 98666-1409; toll-free telephone 800-282-3713; direct telephone 360-619-6379; or e-mail *slprickett@bpa.gov.*

SHELLEY FENTON, Realty Specialist, Bonneville Power Administration – TERR-3, P.O. Box 3621, Portland, OR 97208-3621; toll-free telephone 800-282-3713; direct telephone 503-230-4797; or e-mail *snfenton@bpa.gov.*

