

Big Eddy-Knight Transmission Project

Final Environmental Impact Statement

Volume 3: Comments and Responses

July 2011



DOE/EIS-0421



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Comments and Responses

Overview

This volume presents comments received on the draft EIS, and BPA's responses to these comments.

Comments were submitted through an online comment form, e-mails, letters, and at two open-house style public meetings—one in The Dalles, Oregon, and one in Goldendale, Washington; about 370 comment forms, e-mails, and letters were received from federal, regional, state, and local agencies; Tribes; and private citizens.

Each comment form, email, letter, or other item of correspondence was given an identifying log number when it was received (see table below). Breaks in the number sequence resulted when comments were deleted because they were submitted in error or had inappropriate content (such as SPAM). All comments received on the draft EIS, and BPA's responses to these comments, are provided in their entirety in this volume.

While reading the comments and responses, please note that each page of correspondence is broken up into individual comments and followed by a page of responses. Individual comments and their responses are numbered according to the log number of the correspondence and the comment number (for example, 10005-003 is comment number 3 of correspondence BEKD10005).

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BEKD10002

Heiken/Oregon Wild

- 10002-001 | Please accept the following scoping comments from Oregon Wild regarding the proposed Big Eddy-Knight Transmission Project. We would like to save paper, so please do not send us a hard copy of the EIS. We will look at it online and order a hard copy if we need one. Please co-locate this project with existing powerline rights-of-way as much as possible. The West Alternative looks like it might have the most existing R-O-W, but it also requires an additional Columbia River crossing. Please consider adjusting this alternative to co-locate this project with an existing river crossing. We also urge BPA to make every effort to minimize impacts to scenic values, fish and wildlife and birds, and avoid spreading weeds.
- 10002-002 |
- 10002-003 |
- 10002-004 |

- 10002-001 Oregon Wild has been placed on the mailing list to receive an e-mail notice of the availability of the final EIS on the project webpage. Thank you for helping conserve paper.
- 10002-002 All routing alternatives use existing rights-of-way to some degree. The West Alternative could use about 16 miles of existing 100-foot right-of-way if the option to remove the existing wood pole line were chosen, although an additional 50-foot width of right-of-way would be needed along the entire 16 miles. The Middle Alternative would use about 9 miles of existing right-of-way in an easement of similar transmission towers, with no additional right-of-way needed for most options. The East Alternative would use 14 miles of existing right-of-way in an easement of similar transmission towers, with no additional right-of-way width required.
- 10002-003 The West Alternative follows an existing BPA right-of-way in Oregon as it heads north from Big Eddy Substation. This right-of-way is vacant and does not have any existing transmission lines. This route crosses the Columbia River at a location where there are no other line crossings. Thus, use of the existing vacant right-of-way precludes co-location with existing river crossing facilities.
- 10002-004 Through both project design and mitigation measures, BPA has worked to try to minimize impacts to various resources including scenic values, fish, wildlife, and birds, as well as to avoid the spread of weeds. Please see Chapter 3 of the EIS for an analysis of impacts to various resources and the proposed mitigation measures to lessen or avoid impacts.

BEKD10003

Schimschok Craig A

To: BONNEVILLE POWER ADMINISTRATION , PUBLIC AFFAIRS OFFICE
Cc: FAX 503-230-3285, REGISTERED MAIL TO B.P.A., FILE
Subject: PROPOSED BIG EDDY-KNIGHT SUB STATION

10003-001

THE LAST MAP YOU SENT ME IS ALLOT MORE DEFINITIVE . FIRST OF ALL I WOULD LIKE TO KNOW HOW FAR THESE PROPOSED SUB STATION SITES ARE GOING TO BE FROM MY PROPERTY NEAR GOLDENDALE . EXACTLY (IN FEET AND INCHES IF NEED BE) . ALSO WHAT DIRECTION (NORTH , SOUTH , EAST OR WEST) . THE IMAGE I WAS LEAD TO BELIEVE WAS THESE SITES WERE GOING TO BE CLOSE TO KNIGHT ROAD OVER THE RIDGE FROM MY PROPERTY , OUT OF MY VIEW . THAT WAY ACCESS WOULD BE FROM KNIGHT ROAD . WHERE AS I WOULDN'T HEAR THE NOISE OR SEE THE EYE SORE . ENCLOSED IS A COPY OF MY PLOT MAP .

10003-002

WHEN I PURCHASED THIS PROPERTY THE SOLE INTENT WAS TO HAVE A QUIET , NOT TOO ISOLATED PIECE OF LAND WHERE I COULD ENJOY THE LANDSCAPE , VIEW AND WILDLIFE . AFTER NUMEROUS TRIPS TO THIS AREA I FINALLY FOUND THIS PROPERTY . IF THIS SUBSTATION IS WITHIN HEARING OR SIGHT OF WHERE I AM BUILDING AND PLAN TO RETIRE , YOU WOULD BE TAKING OR ROBBING THAT VALUE AWAY FROM ME . MY ADDRESS AND PHONE NUMBER ARE BELOW .

SINCERELY



MAILING ADDRESS : CRAIG SCHIMSCHOK

PHONE NUMBER :

PAGE 1 OF 2

- 10003-001 On February 10, 2011, BPA provided a letter with a scaled aerial photograph showing the proposed substation locations to the landowner.
- 10003-002 It appears that your property is just north of and adjacent to BPA's fee-owned right-of-way for the Wautoma-Ostrander and Bonneville-Midway lines. The proposed substation sites are just east of your property. Substation Site 1 is adjacent to the property and Substation Site 2 would be about 0.25 mile away. A substation at either site would likely be visible from the property. Please see Section 3.2 of the EIS for additional information on potential visual impacts of the proposed project, and Section 3.6 for additional information on potential wildlife impacts.

BEKD10004

Anita & Robert Hooson
320 Olsen Lane
Goldendale, WA 98620

- 10004-001 | We would like to comment on the proposed transmission line along Knight Rd. We own a piece of property on Fairgrounds Rd off of Knight Road with a wonderful unobstructed view of Mt Adams. We would be extremely disappointed and financially damaged if our view was compromised by the proposed power line. We do intend to recover damages from BPA should this be the case. Mitigation funds must be included in your proposal for folks like ourselves whose property will diminish in value if the view is compromised.
- 10004-002 |

BEKD10006

Ron Zarembo
POB 1259
Goldendale, WA 98620
5097734425, rjz@gorge.net

- 10006-001 | Congress established the Columbia Gorge Scenic Area for several purposes. Putting your power lines there is not part of the purpose. The State of Washington preserves the Columbia Hills State Park to preserve scenic views and native flora. Your power lines do not aid their purpose. The Indian Trust land has been abused enough already. Stop it! The solution is simple that I am amazed it is not an alternative: Build and consolidate these new lines eastward, within the existing right of way on the John Day-Big Eddy. At some point east of the east boundary of the Columbia River Scenic area, go north. The location of the Knight sub-station does not appear to be irreversible. Please stay away from the Columbia River Scenic Area, the Columbia Hills State Park and the Indian Trust land. Thank you for considering my comment.
- 10006-002 |
- 10006-003 |
- 10006-004 |
- 10006-005 |

- 10004-001 Potential visual impacts of the proposed project are discussed in Section 3.2 of the EIS. The proposed line routes would cross about 0.5 mile to the west of Knight Road, so you may be able to see the transmission line towers from your property.
- 10004-002 Section 3.9.2 of the EIS discusses potential project impacts related to land acquisition and property values. While BPA would not compensate landowners for any impacts to views where no land rights are being acquired, directly affected landowners would be compensated based on an appraised value for any new land rights acquired for transmission line rights-of-way or any related access road easements. BPA would also compensate landowners, based on an appraised value, for any fee acquisitions of substation sites or related substation access roads.
- 10006-001 Comment noted. Section 5.23 and Chapter 7 of the EIS discuss the Columbia River Gorge National Scenic Area Act and the proposed project's consistency with the Act's provisions as carried out by the Management Plan for the National Scenic Area. Based on this consistency evaluation, BPA believes that the proposed project is not inconsistent with the Scenic Area Act or its purposes. BPA is continuing to work with the USFS, which administers consistency reviews of proposed federal projects in the National Scenic Area, to further evaluate the project's consistency with the Scenic Area Act.
- 10006-002 Chapter 3 of the EIS analyses the impacts the West Alternative would have on Columbia Hills State Park. The West Alternative would be parallel to or replace an existing BPA wood pole line that has run through that portion of the park since the late 1940s. We recognize that the proposed line would have impacts to the scenic quality and native flora in that area.
- 10006-003 Where the proposed lines cross Indian Trust lands both in Oregon and in Washington, there is existing BPA right-of-way that would accommodate the proposed line. No new easement would be required. Those existing easements have recently been renewed with the appropriate tribal members.
- 10006-004 As described in Chapter 2 of the EIS, BPA considered a South Alternative that would run east along BPA's John Day-Big Eddy transmission lines before heading north to Knight Substation (see Section 2.6 of the EIS). BPA would not be able to build the proposed line in the same corridor as the two existing John Day-Big Eddy lines for electrical reasons (see Section 2.2 of the EIS) because the proposed line would have to be separated from the existing lines by at least 1,200 feet, effectively creating a new corridor. For this reason and as further discussed in Section 2.6 of the EIS, this South Alternative was considered but eliminated from further study in the EIS.
- 10006-005 Thank you for your comments.

BEKD10007

Christina M. Bjergo
Washington

10007-001

As property owners on the Little Klickitat River my family and I are extremely grateful that East Alternative is BPA's preferred choice. This choice keeps our property view of Mount Hood unobstructed. We bought the property to enjoy the scenic views and plan to build and retire there. We have put off building a home, however, as we were uncertain where the lines would be put in and feared it would ruin the value as well as our enjoyment of the location. Again, we are so thankful and full heartedly support the East Alternative.

BEKD10008

Bonnie J. Trosper, Landowner
9274 hwy 14 Po box 193
Wishram, WA 98673
509-637-5482, bjtrospers@yahoo.com

10008-001

We live on Hwy 14 adjacent to Boulder drive to the East. We would like a smaller map showing if the Lines would be going through our property? We have been given the maps you give us and everyone else BUT we would like to have I guess a plotted map showing whose property you would be crossing and to see if our property is on this map? Sincerly John and Bonnie Trosper

10007-001 Thank you for your comments, your preference has been noted. BPA recognizes that wherever the line route is located, it would impact someone's property and views.

10008-001 On March 2, 2011, the landowner was emailed a response describing the location of the proposed transmission line route.

BEKD10009

Doug Miller
Goldendale, WA
doug1031@yahoo.com

- 10009-001 | west side towers appears to use existing right of way that is being used by the wood transmission line to Goldendale, and if the wood towers are removed, would leave room for the new steel towers. (are the wood structures now supplying power or back up power to the Goldendale BPA Substation, and if it is, would an interconnect be made to continue that duty?)
- 10009-002 |
- 10009-003 | the west side towers are less likely to create issues with migrating waterfowl than the middle or east tower sites. (most of the waterfowl seem to move east and west along the flooded portions of the valley, and not down the canyon). the west side tower site may cause some influence on bird migration(raptors in the winter and songbirds in the summer) that use Swale Canyon as an access route, but perhaps the steel towers will be less of an issue than the siting of the existing wood structures if they are replaced in the construction.
- 10009-004 | the middle and east towers could cause some issues with the available land space within the Urban Area for Wishram by having new towers located in the land space.
- 10009-005 | the middle and east towers may be more visible to the viewing public than that of the west tower sites.
- 10009-006 | there may be some benefit of the tower construction coming down the west tower site, as the construction road may allow for more access to view the wild flowers that are on public property. additionally, would provide for fire access to the public property.
- 10009-007 |
- 10009-008 | i would summarize by saying that the construction of the new line along the west side would be a preference (at this time).
- 10009-009 | are there going to be other interconnects available to the new line for additional wind farm generation substations to tie in with?
i could discuss other issues, but they are probably not appropriate for this project.
many thanks for allowing us time and paper to respond to the proposed project.
Doug Miller
Goldendale

- 10009-001 BPA's existing wood pole line (Chenoweth – Goldendale No. 1) provides service to Goldendale Substation. If the West Alternative is selected, adjustments to the power system would be developed consistent with BPA's contractual obligations to support Goldendale Substation. Options for the West Alternative that involve removing the existing Chenoweth-Goldendale transmission line and using its right-of-way for this alternative are described and considered in the EIS (see Table 2-2 in Chapter 2 for a description of these options).
- 10009-002 See response to comment #10009-001.
- 10009-003 As discussed in Section 3.6 of the EIS, avian interactions with transmission lines would be minimized at river and larger canyon crossings by installing bird flight diverters on the overhead ground wires and the fiber optic cables. It is BPA's experience that most avian collisions with transmission lines occur when birds fly perpendicular to the direction of the lines rather than parallel to them. Waterfowl and other bird species are generally not susceptible to colliding with transmission towers.
- 10009-004 The Middle and East alternatives would be within an existing BPA transmission line easement through Wishram, so no new easement would be acquired.
- 10009-005 The visual impacts of the West, Middle, and East alternatives are discussed in Section 3.2 of the EIS. In general, the different alternatives have varying visual impacts based on the location, existing facilities, terrain, and sensitive viewers.
- 10009-006 Comment noted. State agencies managing the public lands along the West Alternative have stated that they do not want additional public access through these properties, so it is uncertain whether these agencies would allow use of BPA access roads as suggested if the West Alternative is chosen.
- 10009-007 There would be additional access built through this area. Please note that the local fire district has stated a preference for not building the West Alternative, because the terrain would make it more difficult to access.
- 10009-008 Thank you for your comments.
- 10009-009 As discussed in Section 1.2 of the EIS, the proposed project is being designed as a high capacity 500-kV electrical pathway between two high-voltage substations in response to firm transmission service requests that BPA has received. Interconnection substations for wind farms in the region typically interconnect only to lower voltage (230-kV or below) transmission lines for many reasons, including the much greater costs of transformers and other equipment for interconnecting to higher voltage lines, and system performance issues from directly connecting to the 500-kV system. Accordingly, there are no plans for, and it is not expected that, any additional wind farms would interconnect to the proposed Big Eddy-Knight transmission line itself. Future interconnections to the system in this area could occur at the proposed Knight Substation but would require the development of a 230-kV electrical yard with associated equipment. If this would occur, then BPA would conduct additional environmental review as appropriate.

BEKD10010



United States Department of the Interior
Bureau of Indian Affairs
Yakama Agency
P.O. Box 632
Toppenish, WA 98948



IN REPLY REFER TO:
4500 Natural Resources
Environmental

RECEIVED
JAN 12 2011

December 20, 2010

Bonneville Power Administration
Public Affairs Office – DKE 7
P.O. Box 14428
Portland, OR 97293-4428

RE: Big Eddy-Knight Transmission Project

Dear Bonneville Power Administration:

The Bureau of Indian Affairs, Yakama Agency would like to register the following concerns and comments pertaining to the Big Eddy-Knight Transmission Project Draft Environmental Impact Statement. Some concerns as expressed below, will address the tribal historic preservation, access restriction, cultural resources, and realty right-of-way issues.

Concerns:

The Yakama Nation as a sovereign nation has been approved by the federal government to conduct all Historic and Cultural Resource Reviews, within the exterior boundaries of the Yakama Reservation. In the past, the project would have been sent to the State of Washington State Historic Preservation Office (SHPO) but presently, the Yakama Nation Tribal Historic Preservation Office (THPO) performs all reviews within the exterior boundaries of the Yakama Reservation (see below for contact details).

10010-001

Contact Information: Yakama Nation Tribal Historic Preservation Office
Ms. Kate Valdez, THPO Officer
Post Office Box 151, 212 ½ West First Avenue
Toppenish, Washington 98948
Phone: 509-865-5121, extension 4840

In addition to the Yakama Nation THPO, the Yakama Nation Cultural Resource Staff need to be in attendance if any disturbance will occur (see below for contact details).

10010-002

Contact Information: Yakama Nation Cultural Resources
Mr. Johnson Meninick, Program Manager
Post Office Box 151
Toppenish, Washington 98948

- 10010-001 Thank you for your comment. BPA has been in discussions with Kate Valdez, Yakama Nation Tribal Historic Preservation Officer, regarding the fiber optic cable Wautoma Option that would pass through the Yakama Nation reservation boundaries on an existing BPA transmission line.
- 10010-002 BPA has been working with Johnson Meninick and his staff to help identify cultural resources and traditional cultural properties along the proposed project, and to help determine mitigation measures to avoid or lessen potential impacts.

Phone: 509-865-5121, extension 4737

10010-003

The Wautoma-Ostrander transmission line passes through the Yakama Reservation, which includes the closed and open areas of the Yakamas. These areas of concern are of restricted access, only enrolled Yakama members have the privilege. In light of this concern, the BPA can retrieve an access permit (courtesy permit) from the Yakama Nation (see below for contact details).

Contact Information: Yakama Nation Tribal Council
Ms. Valentina Renion, Secretary
Post Office Box 151
Toppenish, Washington 98948
Phone: 509-865-5121, extension 4324

10010-004

In review of the draft EIS, the preferred alternatives impact the Yakama Nation with realty right-of-way concerns. The transmission line East Alternative (preferred) will cross Yakama Public Domain Allotments. These Yakama Public Domain Allotments will need right of way easements, which can be obtained with the Yakama Agency. Additionally, the Fiber Optic Cable Wautoma Option (preferred), the fiber would be a change to the right of way. Any new changes to the right-of-way will have to be renegotiated (see below for contact details).

Contact Information: Yakama Nation Trust Real Estate Services
Ms. Karen Lucci, Realty Specialist (Right-of-Way)
Post Office Box 151
Toppenish, Washington 98948
Phone: 509-865-7285, extension 6084

Please contact the above named contacts regarding the concerns of the Yakama Nation and Yakama Agency. If you have any further questions please call to the attention of Rocco Clark, Jr., Natural Resource Specialist (Environmental Coordinator), at 509-865-2255, extension 4195.

Sincerely,



Guy "Bud" Robbins, Superintendent
Yakama Agency

- 10010-003 BPA acquired an easement for the Wautoma-Ostrander transmission line and access roads rights-of-way through the Yakama Reservation. The access roads identified on the easement would be used by BPA's employees to access the transmission line right-of-way. If BPA intends to use any roads not covered by the easement, BPA will apply for any necessary access permits (courtesy permit) from the Yakama Nation. BPA will notify and coordinate with the Yakama Nation for any work being preformed within the Yakama Reservation.
- 10010-004 Comment noted. BPA recently renewed its easement rights for the existing transmission line rights-of-way over Yakama Public Domain allotments in this area. The easement included the right to add a new line of poles or structures and defines a process to establish the consideration to be paid. BPA would be reconstructing and upgrading the existing lines of poles or structures within the rights-of-way. If any new segments of a line of poles or structures are required, BPA will notify and coordinate with BIA's Superintendent and the Yakama Nation for any work being performed within the Yakama Public Domain Allotments as well as for starting the process to acquire additional land rights across any Allotments.
- Concerning the proposed fiber optic cable along BPA's existing Wautoma-Ostrander transmission line, when BPA acquires transmission line easements, it does so for all of the purposes necessary to operate its transmission business. Communications facilities are an integral, necessary part of reliably operating and controlling the transmission system. Therefore, when BPA purchased the easement it also acquired the right to erect and maintain communications facilities appurtenant to its transmission lines.

BEKD10011

Rob Kissler

Mr. Prickett; I appreciate the phone call last week after BPA's public open houses on the Big-Eddy/Knight Transmission project in The Dalles and Goldendale. As I indicated during our conversation driving from Salem with weather conditions so unpredictable in the Gorge was just to potentially dangerous for me to participate in the open houses. You indicated that I could provide written testimony and mail my exhibits to you directly for inclusion to the public record. I'm providing the following information to be included in the record.

10011-001 " The proposed Western Alternative specifically between line mile w-17 to w-20 will severely impact our 20 acre parcel in Mustang Ranch Subdivision located on Morgan Court by the loss of open and unobstructed views of Mt Adams and Mt. Rainer. The current BPA easement located adjacent to our property has an existing 115kv line with wooden poles with maximum height of 65' which is below the open view of the mountains. If the western alternative is chosen as preferred route the design of increased easements widths and pole heights as indicated in Fig 2-6, 2-8, 2-9 and 2-10 using single circuit or double circuit systems is unacceptable with out compensation to property owners up to and including selling the entire parcel due to loss of unobstructed views. As I read the EIS on the Big Eddy/Knight project table 2-8 offers no compensation for immediately adjacent property owners for loss of unobstructed views. I disagree with lack of compensation for lost views which greatly devalues our parcel and other parcels in the development.

10011-002

10011-003 The Big Eddy/Knight EIS indicates that the Eastern Alternative is BPA's preferred route. I agree with this assessment and support the eastern alternative as the preferred route not just only avoiding impacts to our property but the results of the environment impact listed in Table 2-6 and 2-7 indicated in the EIS. From a pure environment impact the Eastern Alternative should be the route used for the Big Eddy/Knight Transmission Project".

10011-004 I will forward supporting exhibits of my concerns on the Western Alternative visual impacts located between line mile w-18 and w-19. I simply have used maximum existing pole height and compare it with maximum single and double circuit pole heights. Figure 3-5 showing existing view versus simulated view in the EIS is not representative of the visual impacts on our development. Please make this e-mail a permanent part of the public record. Let me know if you have questions or need clarification on my statement or exhibits and please reply you have received this e-mail. Thanks.

Respectfully; Rob Kissler

- 10011-001 The EIS describes impacts to landowners and views along the West Alternative (see Sections 3.1, 3.2, and 3.9 of the EIS). The proposed line, using any route alternative, would be visible to various landowners throughout the Klickitat Plateau, many of whom have views of the mountains in the area.
- 10011-002 Please see response to comment #10004-002.
- 10011-003 Your preference has been noted.
- 10011-004 Your photo simulations of views from the Mustang Ranch Subdivision are part of the record. Please see response to comment #10060-001. Thank you.

BEKD10012

January 2011

To the Bonneville Power Administration

My name is Lynn Wanless and I am a concerned resident of Goldendale writing my own Personal Impact Statement regarding the Big Eddy Power Line Project. I know that you have spent many man hours and a lot of money to write an EIS of your own about this proposed transmission line. And I know that I am only one person versus your huge business. But no one has asked my opinion about this project until now. The project does not touch my personal property, but it does pass very close to me (less than 1/2 mile) and some of it is on family property. I live on Fish Hatchery Road, just west of where the line's route is proposed.

Yesterday, as I was driving home it became very apparent to me that I needed to put my thoughts on paper. It was cold and there was snow on the ground in the field that had been plowed this fall. At the crest of the hill, right above where the 'line' would go was the most beautiful and majestic bald eagle. He sat in the field and looked at me because I stopped the car to get a better look at him. I realized then that if the power line were there he might never come back to hunt here! And he wasn't the only one. We have so many red tailed hawks and kestrels that live around us and hunt in those open fields. I think that they, too, would be threatened by an enormous power line running through their habitat. Each season that the geese migrate, they land in these fields and rest and feed overnight. What would happen to their flight patterns if the power line were there? I am not reporting to you scientific evidence, it is simply my observations from having lived here all my life. There are countless others, badgers, coyotes, bats, fox, that will be impacted by your project. They certainly can't speak for themselves, but I hope that my voice might be heard.

People live here in Goldendale for many reasons. My roots are here and they run very deep. One of the things with which we are blessed with living here in Goldendale and this beautiful valley are the views. It seems lately that this one gift has been threatened over and over. Somehow these threats seem to come from our hunger for power. First, the steam generation plant was built. Granted it is clean energy, but it is now a major sight on our landscape. Then came the windmills. Also clean energy, but they have most certainly changed our landscape views of the Columbia Hills. And now this form of clean energy—a giant power transmission line will cut right through this magnificent valley and these beautiful farm lands and cause an enormous blot on the views of Mt. Adams, Mt. St. Helens, and Mt. Hood. There is absolutely nothing, in my opinion, beautiful about a power transmission line.

I know I am one voice against a giant business. I know that there has to be some alternative to placing this line close to the city of Goldendale. Perhaps there is an alternative that doesn't involve putting a line up at all. I sure don't know what that is, but I have a hunch that your resources are much grander than mine. Mine is a 'gut' feeling

10012-001

- 10012-001 We appreciate your letter describing the Klickitat Plateau, what it means to those who live there, and the nature that exists in the area. We want you to know that the project team (environmental specialists, engineers, and lands specialists) has spent many months walking and driving along the project routes. Staff working on the project have recognized the serenity of the area and the beautiful views that it provides on crisp clear days, as well as the graciousness of the people we have met at the public meetings, over the phone, and during house visits.
- During our field observations, we have seen many of the birds and animals you listed. As described in Section 3.6 of the EIS, if the line is built, some of those species would leave the immediate area during construction activities, but would return and coexist with the transmission line, as we have seen happen on other projects. There are prairie falcon and golden eagles nests very close to our existing lines along the Columbia Gorge as well as bald eagle nests along I-84. In addition, as discussed in Section 3.2 of the EIS, it is acknowledged that portions of the proposed line would be located in areas that would affect scenic views from some vantage points including from residents.
- As reflected in the EIS, BPA tried to be thoughtful while considering and weighing all of these and other issues—trying to site the line where there would be the least impact while still addressing the electrical system needs, and listening to landowners’ and other’s concerns and incorporating their ideas where possible. The development of this proposed project has not been done in a vacuum or without regard to the landscape in which it may be built. We value your input and sincerely appreciate your comments.

10012-001
continued

that should this line go up a lot of people who didn't say anything to BPA right now will wish they had. My gut feeling comes from a daily feeling of awe and wonder that I live in such a beautiful valley. My gut feeling says there has to be a better, less visually impacting location. You are the BIG business who lives far away, who looks at a computer and plots out locations for power lines that are less costly and easier to access and repair. Your engineers and employees probably don't drive the road every day that would run right under this power line. Or walk down this road for exercise, to watch the birds and to listen to the silence. It is difficult for someone in an office far away to have this same appreciation for the beauty around this area. That is why I feel compelled to tell you.

I am one voice. But my whole being is very saddened by this project. I hope that Bonneville will seriously consider the impact this project will have at a much deeper level than the tomes that have been written on paper. This isn't a business decision, it is a decision that will affect many people in this valley at a level of our hearts and souls.

End of responses for previous correspondence.

BEKD10013

**STATEMENT OF
JAMES MARKMAN**

**BPA PUBLIC MEETING OF JANUARY 11, 2011, ON THE
BIG EDDY-KNIGHT TRANSMISSION PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT (TEP-TTP-3)**

Thank you for this opportunity to comment on the draft environmental impact statement ("Draft EIS") on the proposed Big Eddy-Knight Transmission Project. I will focus my comments on a single element of the draft EIS, dealing with a one-mile rerouting of either of two alternative transmission paths, the "Middle Alternative" and the "East Alternative." Although not characterized as such in the Draft EIS, I believe that this rerouting should be treated as a Fourth Alternative in the final EIS to follow the public comments on the Draft EIS.

This Fourth Alternative is described in the Draft EIS at page 2-23, regarding the Middle Alternative, and again in identical text at page 2-25, regarding the East Alternative:

There are various right-of-way and tower combination options for the Middle Alternative. As the Middle Alternative exits Big Eddy Substation, it would cross BPA property that surrounds the substation until it meets up with the existing Harvalum-Big Eddy transmission line. The Harvalum-Big Eddy line has extra right-of-way and building the proposed line on the west side of it would only require an additional 12.5 feet of right-of-way. BPA is also considering removing the Harvalum-Big Eddy line through this section (line mile ME1-9) and rebuilding the line with double-circuit towers to carry both the existing and proposed line. No new right-of-way would be required for the double-circuit tower option. However, for the double-circuit option, BPA is also considering moving an about 1-mile long section of the line near ME7 to the west so the river crossing tower on the Oregon side would be west of the existing crossing by about 1,000 feet. Changing this section, which is within the boundary of the National Scenic Area, would abandon the existing Columbia River crossing for the Harvalum-Big Eddy Line and establish a new combined corridor (of equal width) for this existing line and the proposed line. The termination point of the river crossing on the Washington side of the river would remain unchanged.

This one-mile reroute concerns a segment that would be common to both the Middle Alternative and East Alternative.

Comments of James Markman, BPA Hearing of January 11, 2011, Draft EIS, ETP-TTP-3
Page 1

10013-001

- 10013-001 This potential route adjustment between line miles ME6-8 along the Middle and East alternatives has been analyzed and is being considered (please see Chapters 2 and 3 and Map B-3 in Appendix B of the EIS). BPA considers it an adjustment to the proposed alternative, rather than a fourth alternative, because it would be a relatively small deviation along the proposed 28-mile line routing alternative and does not provide a completely new route.

10013-002 | My interest in this Fourth Alternative derives from the fact that I am the owner of the
home that would experience the high levels of "corona noise" if the one-mile rerouting
mentioned above is not part of the final project, assuming BPA were to select either the Middle
Alternative or the East Alternative. See Draft EIS, Section S.4.11, page S-15. I am seriously
10013-003 | concerned about the potential adverse health effects of this corona noise to me and to my family.
10013-004 | I also fear that this corona noise could seriously lessen the value of my property.

10013-005 | I believe that the right-of-way for this fourth Alternative is available to BPA. Last
summer, I was informed by a BPA contractor that the Fourth Alternative could actually lower
BPA's cost of the Big Eddy-Knight Transmission Project because it would shorten to length of
10013-006 | the project. Thus, it appears to me that BPA's selection of the Fourth Alternative (assuming it
does not select the West Alternative instead) would reduce both the adverse environmental
effects and the economic cost of the Big Eddy-Knight Transmission Project.

I also plan to file written comments on the Draft EIS. These are due by January 28, 2011.
10013-007 | In order to comment further on the one-mile rerouting that I have characterized as BPA's Fourth
Alternative, I hereby request copies of all studies and other information that BPA has assembled
regarding this alternative. Please provide me this information by Friday, January 14, 2011, in
order to allow me sufficient time to review it and reflect it in my written comments. If BPA
were to proceed with either the Middle Alternative or the East Alternative, without this one-mile
reroute, I believe that my family and I will experience irreparable harm from the corona noise
10013-008 | that BPA acknowledges it will cause the occupants of my home.

I would appreciate it if you would also provide the documentation, requested above, to
my attorney, Mr. John Cameron, and to the Staff of Congressman Greg Walden. Thank you for
this opportunity to comment.

Comments of James Markman, BPA Hearing of January 11, 2011, Draft EIS, ETP-TPP-3
Page 2

- 10013-002 The house referenced on page S-15 of the EIS is near Wishram, Washington and is not the home of the commentor. The Wishram home is 71 feet from the proposed single-circuit line. For the original alignment of the Middle and East alternatives in the vicinity of the commentor's house, the house would be 303 feet from the new line with the single-circuit option described in the EIS, and 191 feet from the new line with the double-circuit option described in the EIS. The double-circuit option is the preferred option for this project. The foul weather audible noise levels currently at the house are about 31 dBA. Assuming BPA decides to build the Middle or East alternative on the original alignment near your home, these levels would be about 43 dBA if the single-circuit option is chosen and about 44 dBA if the double-circuit option is chosen.
- See Section 3.11 of the EIS for a discussion of the noise impacts of the construction and operation of the proposed line. Also see Appendix E, Section 7 of the EIS for more discussion and predicted levels of audible noise at the edge of the right-of-way.
- 10013-003 As explained in the EIS, corona noise is described as a hum and/or crackling from the energized conductors and while it can be perceived, it is not typically associated with health concerns. The noise levels predicted for this line would meet Oregon and Washington noise regulations.
- Most people relate magnetic fields (EMF) to health effects. The magnetic fields at your home would be reduced by using the double-circuit option presented in the EIS. The maximum magnetic fields currently at your home are about 7.7 mG and would decrease to 4.3 mG if the double-circuit option is chosen. These numbers assume that the one-mile reroute is not part of the final project. See Section 3.12 of the EIS for a discussion about magnetic fields. Also, more information is provided in Appendix E of the EIS along with predicted levels of magnetic fields (note the preferred configuration near your home is No. 8). Appendix F of the EIS has a discussion on the state of the health effects research related to electric and magnetic fields.
- 10013-004 The EIS discusses impacts to property values in Section 3.9 of the EIS. Corona noise in and of itself has not been associated with a decrease in property values.
- 10013-005 A route adjustment that includes a small change at the Columbia River crossing is still under consideration. Two landowners own property crossed in the existing right-of-way corridor and in the possible reroute. Both landowners have been willing to consider the reroute of the easement across their properties. The route adjustment is BPA's preferred route in this area.
- 10013-006 The route adjustment at line miles ME6-8 would require the acquisition of new right-of-way and the abandonment of the existing right-of-way easement through this area, which is within the National Scenic Area. The route would require one less tower, which considered by itself would reduce the project cost by the cost of one tower. One less tower would also lessen the footprint of the project by about 0.2 acre. BPA is discussing this adjustment with the landowners involved and the USFS so BPA can make an informed decision.
- 10013-007 Maps of the potential route adjustment have been provided to the commentor.
- 10013-008 Comment noted. Please see responses to comments #10013-002 and #10013-003.

BEKD10014

10014-001

#1 I fully support B.P.A. plan for the east route of the Big Eddy-Knight sub station power line.

10014-002

#2 It will not harm anything on the south side of the mountain and a little money for the farmers and no problem from my running farm machines around the Big Eddie-Spring Creek line in the past. I now live in Wiswam, $\frac{1}{4}$ to $\frac{1}{2}$ mile from Big Eddy-McNary line and never any problems.

10014-003

#3 A suggestion
Leave the present line-Big Eddy-McNary-Ross line as it is now.
Build a double-circuit line from Big Eddy to Knight substation.
That would leave room for another circuit from Big Eddy to Knight substation or a line to John Day for future use and growth.
Also use could keep using the present line, while the new line was being built.

Vernant A. Jussila

- 10014-001 Your preference has been noted.
- 10014-002 Thank you for sharing your experience of living and working around transmission lines.
- 10014-003 Comment noted. BPA has included an option in the EIS of building an additional and separate new single-circuit transmission line from BPA's Big Eddy Substation to Knight Substation that would not involve rebuilding portions of the existing McNary-Ross or Harvalum-Big Eddy transmission lines as double-circuit lines. As discussed in the EIS, this option would require additional right-of-way in some areas and would introduce an additional transmission line (with its greater visual, ground disturbance, vegetation, and potential cultural and wildlife impacts) as compared to rebuilding portions of the existing lines as double-circuit lines within BPA's existing rights-of-way. Regarding an entirely new, additional double-circuit transmission line, such a line likely would have even greater environmental effects, and there is insufficient justification for such a line at this time. If future growth requires additional transmission capacity in the future, BPA would evaluate different options for providing that capacity at that time.

**Public Comments
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January 11, 2011 4:00 p.m. to 7:00 p.m.**

BEKD10015

- | | |
|-----------|---|
| 10015-001 | <ul style="list-style-type: none"> ▪ Is this line built to send power to California? |
| 10015-002 | <ul style="list-style-type: none"> ▪ What is the purpose and need of this project? Is this a part of federally funded project that they were talking about a year or so to stimulate the economy? (city council member). ▪ Are there plans for another line along Wautoma-Ostrander line going west? |
| 10015-003 | <ul style="list-style-type: none"> ▪ Is there a future plan to add transmission next to the Wautoma-Ostrander line? Property owner next to the line. ▪ Build a double-circuit line next to the existing line from mile 0-14 to use for future growth. ▪ Add second double-circuit line for future expansion. |
| 10015-004 | <ul style="list-style-type: none"> ▪ Will you add new towers next to what is existing? |
| 10015-005 | <ul style="list-style-type: none"> ▪ Use right-of-way BPA already has (through Wishram). |
| 10015-006 | <ul style="list-style-type: none"> ▪ Move tower out of present easement: the Middle/East Alternatives 230-kv at river crossing, Oregon side. |
| 10015-007 | <ul style="list-style-type: none"> ▪ How much time does it take to remove an existing tower and install a new tower? |
| 10015-008 | <ul style="list-style-type: none"> ▪ What is the weight of crane type used to install towers? |
| 10015-009 | <ul style="list-style-type: none"> ▪ What is the typical substation size? |
| 10015-010 | <ul style="list-style-type: none"> ▪ What would change BPA's preferred to a different route? ▪ What would make the administrator decide a different alternative than the preferred? |
| 10015-011 | <ul style="list-style-type: none"> ▪ Taking out Harvalum – Big Eddy line for construction affects wind projects - Puget Sound Energy + Lindum (outage would affect BPA ability to deliver wind). ▪ Taking out the Harvalum-Big Eddy line during construction affects wind/green power and that is important to BPA. Will be difficult to justify getting an outage. |
| 10015-012 | <ul style="list-style-type: none"> ▪ Follow specific requests when accessing landowner properties. ▪ Better communication between landowners and those who access their property (gates, where to [not] drive, etc.). |
| 10015-013 | <ul style="list-style-type: none"> ▪ West Alternative WA side up past W4 is zoned rural residential 2-acre lots—best not to build 250'-tall towers over this area. |
| 10015-014 | <ul style="list-style-type: none"> ▪ Concerned with DNR land and State Parks. ▪ West alignment along existing 115 line [Spearfish Tap] is very noisy. |
| 10015-015 | <ul style="list-style-type: none"> ▪ Concerns about noise. ▪ Concerns about noise impacts (river crossing). |
| 10015-016 | <ul style="list-style-type: none"> ▪ Line interference on AM car radio from Spearfish tap line (120 microvolts/meter measured on meter from house). |
| 10015-017 | <ul style="list-style-type: none"> ▪ Concerns about health when living close to the line. |

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- 10015-001 As discussed in Chapter 1 of the EIS, this transmission line is being proposed in response to requests for firm transmission service through the project area. This proposed project also would increase the reliability of the high-voltage transmission system in the area. The additional system capacity provided would allow power to be better moved primarily in the project vicinity and throughout the region, but also potentially to other regions that an individual customer may be seeking to reach. The proposed project would be funded by BPA, a federal agency, and has been considered as a Recovery Act project intended to help stimulate the economy.
- 10015-002 BPA has no plan to add a transmission line next to the existing Wautoma-Ostrander line in the foreseeable future.
- 10015-003 Please see response to comment #10014-003.
- 10015-004 All alternatives have portions of line that would parallel or rebuild existing towers. Please see Section 2.4 of the EIS for a description of the alternatives and more details about the various tower configuration options within each alternative.
- 10015-005 The Middle and East alternatives propose to use the existing BPA right-of-way through the Wishram area.
- 10015-006 BPA is considering this potential route adjustment between line miles ME6-8 along the Middle and East alternatives. Please see response to comment #10013-001.
- 10015-007 The removal and construction process occurs in a number of phases. The work that occurs in these phases is likely performed by different crews. The process is ultimately up to the construction contractor, but here is a typical construction process with one crew (3-5 workers) performing each action: remove existing wires, remove existing towers, transport steel away from tower site, transport new steel to tower site, install footings, assemble steel, erect the new tower, and string new wires. Each action may not take very long, from a few days to a week, but the entire process can take months. The construction contractor would work with each individual landowner to help address construction issues, concerns, and timing constraints.
- 10015-008 Two types of cranes would be used: a 50-ton crane to set the tower legs and first body section, and a 210-ton crane to set the rest of the tower.
- 10015-009 A typical 500-kV substation is about 25 to 30 acres.
- 10015-010 While BPA has identified a preferred alternative for the proposed project in the draft and final EISs, BPA has not yet made a final decision concerning which route it would select if a decision is made to proceed with the proposed project. BPA is continuing to evaluate the various environmental factors and other considerations identified in the EIS and in public and agency comments on the proposed project. If a decision is made to proceed with the proposed project, BPA would take into consideration how well each of the action alternatives, including the identified Preferred Alternative, meet the various project purposes discussed in Chapter 1 of the EIS. All of these considerations could affect whether BPA would select the Preferred Alternative or some other alternative, including the No Action Alternative, from the EIS.
- 10015-011 Transmission system expansion projects often require outages on nearby transmission facilities to ensure the safety of the construction personnel involved in the work. BPA plans and studies all scheduled system line outages. Schedules would be adjusted to optimize system performance by avoiding undesirable system impacts. This often

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BEKD10015

10015-017
continued |

10015-018 |

10015-019 |

10015-020 |

10015-021 |

- Concerns about health impacts (river crossing).
- What is a ballpark figure for purchasing land for a substation?
- Concerned about lighting on towers.
- Conductors falling off DC test line. BPA should keep easement but take down line.
- DC test towers will never be used again - any new line would have different structure criteria.
- What long-term plan does BPA have with the DC test line right-of-way?
- Remove DC test line.
- DC test line conductor down on the ground.
- Regarding the expansion at Maupin Substation for wind interconnection: will BPA purchase more property?

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- ...(10015-011 continued) requires avoiding outages during particular times of the year to minimize negative impacts to both customers and system reliability.
- 10015-012 BPA has tried to follow landowner requests given through the permission-to-enter properties form and over the phone. We apologize if this did not occur.
- 10015-013 Sections 3.1 and 5.24 of the EIS recognize the rural residential zoning in this area. Currently there are few houses in this vicinity.
- 10015-014 The EIS analyzes impacts to DNR land and state parks. Please see Sections 3.1, 3.2, 3.3, 6.2, and Appendix I of the EIS.
- 10015-015 Construction and operation of the proposed line would generate several different types of noise. One type of noise would be the noise created by construction activities. This noise would be short-term and intermittent, and would occur only in specific locations until construction activities end. See Section 3.11 of the EIS for a discussion of the noise impacts of construction and operation of the proposed line.
- Another type of noise would be the corona noise generated during line operations, particularly during foul weather. For each of the action alternatives the noise levels range from 40 to 49 dBA at the edge of the right-of-way during foul weather. The noise levels predicted for this line would meet Oregon and Washington noise regulations. See Appendix E, Section 7, of the EIS for more discussion and predicted levels of audible noise on and near the right-of-way.
- Lastly, radio and television interference is sometimes called radio and television noise. The fair weather radio interference levels are predicted between 25 and 41 dB(μ V/m). The foul weather television interference levels are predicted between 2 and 24 dB (μ V/m). BPA has an active program to identify, investigate and mitigate radio and television interference complaints. This subject is discussed in Section 3.12.2 and Appendix E, Section 8 of the EIS.
- 10015-016 This concern has been identified and the appropriate personnel have been notified to investigate radio interference from Spearfish Tap.
- 10015-017 Section 3.12 of the EIS discusses potential public health and safety issues. Appendix F of the EIS provides a summary of research on electric and magnetic fields research on health effects.
- 10015-018 The cost of land for a substation is dependent on the existing land use, location, and other relevant factors that affect the land value. A preliminary estimate for land for Knight Substation is about \$180,000.
- 10015-019 Tower lighting needs and visual impacts from tower lighting are described in Sections 2.3.2 and 3.2 of the EIS.
- 10015-020 BPA's existing DC test line that extends about 4 to 5 miles northeast of BPA's Big Eddy Substation is not part of the proposed Big Eddy-Knight Transmission Project and actions related to this test line are not within the scope of the EIS. For questions or concerns about the DC test line, you may contact the district manager, Dave Koski at (541) 296-4694.
- 10015-021 BPA's existing Maupin Substation is not part of the Big Eddy-Knight Transmission Project and thus is not within the scope of the EIS. For questions about Maupin Substation you may contact Cherilyn Randall at ccrandall@bpa.gov.

**Public Comments
Goldendale Open House Public Meeting
January 12, 2011 4:00 p.m. to 7:00 p.m.**

BEKD10016

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|-----------|--|
| 10016-001 | <ul style="list-style-type: none">▪ ...Why is this project needed? Aren't we pushing this project for the wind generation?▪ Will wind be tied into the proposed line?▪ We are growing and need more juice. |
| 10016-002 | <ul style="list-style-type: none">▪ Wind power needs back-up and more transmission lines.▪ Power not specific for this area.▪ We are removing out dams (Klamath River, four dams) and the coal plant to save salmon: removing reliable sources which encourage the impacts of wind development. |
| 10016-003 | <ul style="list-style-type: none">▪ Would like BPA to use non-wire technology: provide more info on non-wire studies. |
| 10016-004 | <ul style="list-style-type: none">▪ Consider underground. |
| 10016-005 | <ul style="list-style-type: none">▪ Visual simulation of substations from Pine Forest Road.▪ Can you superimpose pictures of towers on pictures of the view to see how it would impact views? |
| 10016-006 | <ul style="list-style-type: none">▪ Would like large property map for Centerville Fire Department (good ownership info).▪ Want a parcel map on the web without personal info.▪ Are the maps available to the public? |
| 10016-007 | <ul style="list-style-type: none">▪ Meeting format is good for one-on-one: face to face with decision makers. But lacks the ability to hear other attendees' comments and concerns.▪ Didn't like the format of the meeting because it dissipates the energy of the community. |
| 10016-008 | <ul style="list-style-type: none">▪ Everyone's been very nice to talk to.▪ Called in to BPA, and everyone she talked to was very helpful. |
| 10016-009 | <ul style="list-style-type: none">▪ Why is BPA allowing the state to intimidate you; I read the Washington State scoping comments and they were rude and unprofessional.▪ State agencies are unfairly harsh on the West Alternative while landowners prefer the West, the state is forcing BPA to the East.▪ BPA does not want to fight the state.▪ Why can't the government (state lands—West Alternative state park) support the common good? Six miles would then not impact private property.▪ Why do the state properties have more importance than private farms?▪ Do not discount public land just because the state says they do not want the line.▪ EIS seems to support state versus private property.▪ Why is the Department of Natural Resources interested in protecting their lands at a cost to the private landowner?▪ The state and Gorge Commission has more clout than the landowners and public. |

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- 10016-001 The need for the proposed project is discussed in Section 1.2 of the EIS. As discussed in Section 1.1 of the EIS, BPA is proposing this project to respond to requests for firm transmission service, with most of these requests from existing or proposed wind developments. See the response to comment #10009-009 concerning interconnecting to the proposed Big Eddy-Knight transmission line.
- 10016-002 The opinions of the commentors are noted. See response to comment #10015-001 concerning how the project would be used to help better move power throughout the area.
- 10016-003 Please see Section 2.6.1 of the EIS regarding non-wire alternatives.
- 10016-004 Please see Section 2.6.3 of the EIS regarding underground alternatives.
- 10016-005 Please see Section 3.2 of the EIS for photo simulations of the towers and locations of the substations.
- 10016-006 A large aerial photo map with property boundaries is available on the project Web site. Due to privacy concerns, this map does not identify property owners' names.
- 10016-007 BPA finds that the open-house style public meetings allows for one-on-one discussions and that we can hear and understand more clearly public concerns, make contacts with landowners for further follow-ups, and when possible work through routing or other issues directly at the meetings. In addition, during the meetings, BPA posted all comments received at the meetings along the walls so participants could view the comments of others. These comments have also been posted on BPA's Web site and included in the EIS.
- 10016-008 Thank you for your comments.
- 10016-009 Comments noted. While BPA has identified a preferred alternative (the East Alternative) in the EIS, all action alternatives, and the No Action Alternative, are still under consideration at this time. BPA is considering all the input from members of the public, various state, regional, and local agencies, Tribes, and interest groups concerning the proposed project, and their issues and concerns with each of the routing alternatives. In doing so, BPA does not intend to necessarily indicate a preference for one viewpoint over another; rather, for purposes of the EIS, BPA is looking toward the significance of the environmental issues raised by this input. Consideration of this input has helped inform BPA's identification of the East Alternative as its Preferred Alternative in the EIS. As discussed in response to comment #10015-010, this input and other factors will be further considered in selecting a routing alternative if a decision is made to proceed with the proposed project.

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BEKD10016

- 10016-009 |
continued |
- 10016-010 |
- 10016-011 |
- 10016-012 |
- 10016-013 |
- 10016-014 |
- 10016-015 |
- 10016-016 |
- 10016-017 |
- 10016-018 |
- 10016-019 |
- 10016-020 |
- 10016-021 |
- Why not take routes with majority of state lands instead of dealing with private individuals?
 - BPA is doing only what Friends of the Gorge wants.
 - West Alternative goes through state park, increases the footprint considerably (by 2.5 times) 100 feet to 250 feet!
 - BPA is non-responsive and have already made up your minds.
 - Would like the decision maker to come to the area, see the area, and meet with landowners and see the impacts—specifically visual—and let landowners know he's coming.
 - Hope that we can have an impact on the decision.
 - Do you sell the extra fibers in the fiber cable?
 - Is the fiber available for public use? What is NOANET?
 - Will the fiber optic for the project be available to the public?
 - Do people steal fiber cable?
 - What happened to the blockhouse option?
 - Why not move the substation further west to make the blockhouse option more viable?
 - What happened to the route option [blockhouse option] which used existing right-of-way.
 - Preferring the blockhouse route option.
 - Why not substation A location?
 - Property owner next to the preferred option. She is against the preferred option because it is next to her property.
 - Is the preferred option going into the substation next to the Knight Road or is it going to be on the road? How about the 115-kV line next to the Knight Road now?
 - West option makes most sense, east is not a good option. West already has a wood pole line.
 - Why not follow the existing line on the west? It makes sense.
 - The Middle and East Routes make no sense because you have an existing line on the West.
 - Why build on new right-of-way when folks on the West Alternative bought knowing there was existing right-of-way?
 - Does the West Alternative use new or existing right-of-way?
 - Prefer the West route.
 - West option is the best option.

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- 10016-010 Please see response to comment #10016-009.
- 10016-011 The West Alternative options that would build the line parallel to the existing transmission line through the park would require an additional 150 feet of right-of-way. Options that would remove the existing line would require an additional 50 feet of right-of-way. Please see Section 2.4 of the EIS for a complete description of the West Alternative, and Chapter 3 for analysis of the impacts of the various options.
- 10016-012 Public comment is a major part of the NEPA process and project planning. It helps BPA understand the issues that need to be addressed, identify possible alternatives and routing adjustments, and determine appropriate mitigation measures. Many factors go into the decision making process. See also responses to comments #1002-001 and #10015-010.
- 10016-013 BPA does not sell any fibers within the fiber optic cable. Any excess fibers not currently being used for communication needs can be leased with a short-term agreement.
- 10016-014 Unused fiber has not yet been leased by the public. The public may have access through non-profits like Northern Open Access Network (NOANET).
- 10016-015 Although not a common occurrence, BPA's fiber optic cable occasionally has been vandalized and stolen in the past.
- 10016-016 As described in Section 2.6.4 of the EIS, the Blockhouse Option was eliminated because houses would need to be removed. Engineers studied this option and could not make it feasible and it was dropped from further consideration.
- 10016-017 As described in Section 2.6.5 of the EIS, Substation Site A was eliminated from detailed consideration because it did not perform electrically as well as proposed substation sites 1 and 2, and the northern portion of the West Alternative (Blockhouse Option) was eliminated from detailed consideration.
- 10016-018 Comment noted.
- 10016-019 Please see Section 2.4.5 and Map 2-2 of the EIS for location information for the proposed Knight Substation sites. Neither site would be directly on Knight Road. There is no existing 115-kV line on Knight Road in the vicinity of the proposed substation sites, however, BPA has two transmission lines (one 500-kV line and one 230-kV line) that cross Knight Road in that location.
- 10016-020 The opinions of the commentors are noted. As described in the EIS, each alternative has various trade-offs that would be factored into any decision on whether or not to build the proposed project and which alternative to select if the decision is to build. All transmission line routing alternatives use portions of existing BPA right-of-way. Please also see response to comment #10002-002.
- 10016-021 Comment noted.

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BEKD10016

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|-----------|---|
| 10016-022 | ▪ Choose the West Route. |
| 10016-023 | ▪ Why was the Middle Route not routed down Mattson or Woods Road? |
| 10016-024 | ▪ Why is there a jog in the East Alternative mile 20-23? Why not continue north from Enyeart Road? |
| 10016-025 | ▪ Consider coming right down Knight Road. |
| 10016-026 | ▪ Prefer East alignment. |
| 10016-027 | ▪ Prefer the East Alternative. |
| 10016-028 | ▪ Not comfortable not having an option, that is, all alternatives go up Knight Road. |
| 10016-029 | ▪ EIS doesn't take into account future line maintenance costs. |
| 10016-030 | ▪ How will substation service be routed to the substation? |
| 10016-031 | ▪ What is the height of the tower or structure? |
| 10016-032 | ▪ Can towers be taller near [towers] 25/4-25/6? How tall are they currently, as proposed? |
| 10016-033 | ▪ Two lines affect many more people than one line. |
| 10016-034 | ▪ The project will benefit more people than it will hurt. |
| 10016-035 | ▪ Concerns about long-term effects. |
| | ▪ How does BPA control erosion in my fields, around towers? |
| | ▪ Creating erosion due to tower installation. |
| 10016-036 | ▪ East takes best farm ground in the valley. |
| | ▪ East Route goes through prime farmland. |
| | ▪ Two miles of right-of-way through prime farmland. |
| | ▪ Concern about roads on property; loss of crops. |
| | ▪ Why wasn't the West Option preferred? It doesn't go through farmland. The East option does and creates problems for a lot of landowners and farmers. The West Option for the most part has the easements. |
| | ▪ I am concerned about construction in sheep grazing land and hayfield. |
| 10016-037 | ▪ Towers are difficult to farm around. |
| | ▪ Effects on circle irrigation in the future. |
| | ▪ Towers and lines affect flight patterns of crop dusters--not only have to stop and turn but makes coverage spotty. |
| | ▪ Need to reclaim farmland in the future and lines will be there. |
| | ▪ Concerns about EMFs and plant/crop growth. |
| | ▪ Does EMF affect...plants? |

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10016-022	Comment noted.
10016-023	One of the many considerations in line routing is limiting the amount of exposure to major structures, particularly family dwellings and housing. This is one of the main reasons the Middle Alternative was not routed along Mattson or Woods roads.
10016-024	The jog in the East Alternative was placed in the line route to limit the amount of exposure to major structures, particularly family dwellings and housing.
10016-025	Because of the proximity of family dwellings and housing along Knight Road the proposed line was routed to the west of Knight Road in this area.
10016-026	Comment noted.
10016-027	Comment noted.
10016-028	Comment noted.
10016-029	Future transmission line maintenance costs would generally be equal across all action alternatives.
10016-030	Section 2.4.5, Knight Substation Options, has been updated to include information about how the substation service would be routed to Knight Substation location.
10016-031	Tower 25/4 is 130 feet tall, Tower 25/5 is 135 feet tall, and Tower 25/6 (which is now 26/1) is 138 feet tall. Current tower heights provide adequate ground clearance for the conductor, therefore they do not need to be raised, particularly because of the proximity of the towers to Goldendale Airport.
10016-032	Comment noted.
10016-033	Comment noted.
10016-034	Section 3.12 of the EIS discusses potential public health and safety issues. Appendix F of the EIS provides a summary of research on electric and magnetic fields research on health effects.
10016-035	The project would be covered under a National Pollution Detection and Elimination System (NPDES) construction stormwater permit, which requires the implementation of a Storm Water Pollution Prevention (SWPP) Plan. The SWPP Plan addresses project requirements to minimize the release of sediment to surface waters by using low impact construction methods and erosion and sediment control measures (design, installation, inspection and maintenance of Best Management Practices [BMPs]). The need for BMPs is site specific and is addressed by the erosion and sediment control lead and is dependant on soil, type of construction, slope, wind, weather and potential for sediment to enter surface water. General erosion and sediment control measures implemented during construction would include installation of a sediment fence in areas with the potential for sediment to enter a surface water, and use of water trucks to reduce the release of fugitive dust. In addition, all disturbed areas would be re-contoured, stabilized (compacted/track walked), and seeded/hydro-seeded with a native seed mix as soon as possible after construction.
10016-036	As described in Section 3.1 of the EIS, all action alternatives would impact prime farmland and farmland of statewide importance.
10016-037	As described in Section 3.1 of the EIS, the proposed line would make (<i>continued</i>)...

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| 10016-038 | ▪ The potential for future subdivisions on the Middle and East Alternatives not acknowledged. |
| 10016-039 | ▪ East Route has a tower next to rental property. |
| 10016-040 | ▪ A new line, industrial looking structures, would impact the possibility of agro-tourism. |
| | ▪ Potential wind turbines near mile 12-13 on West Alternative. |
| | ▪ Agrees with East Alternative being preferred because it consolidates the energy (wind) generation/transmission areas into one place. |
| 10016-041 | ▪ Due to the development of the wind turbines, the power lines (energy industry) should be consolidated into a small (same) area. |
| | ▪ East Route—aerial habitat has already been degraded so it makes sense to put the line in those areas. |
| | ▪ When does this adding new transmission line stop? |
| 10016-042 | ▪ Area seems to get slammed for power—wind turbines, line. |
| | ▪ Don't want wind turbines to pop up near the line. |
| 10016-043 | ▪ Powerline would change community--shifting from agricultural to industrial--not consistent with goals of Klickitat County Plans. |
| 10016-044 | ▪ Someone drove through an access road [on private property] without permission. |
| 10016-045 | ▪ Concern about...noise near houses. |
| | ▪ Concern about corona...near houses. |
| 10016-046 | ▪ Concern about pacemakers. |
| 10016-047 | ▪ Transmission lines impact allergies. |
| 10016-048 | ▪ How far from the line does EMF extend? |
| 10016-049 | ▪ Concerned about shocks from the line—horseback riding. |
| | ▪ Concern about grounding of the line. |
| 10016-050 | ▪ Sensitivity to electrical effects. |
| 10016-051 | ▪ West alignment access improvements would benefit access and fire safety. |
| 10016-052 | ▪ There is an existing gas pipeline that the alternatives go right over. |
| | ▪ I am concerned about property value impacts. |
| | ▪ Towers really devalue property. |
| 10016-053 | ▪ ...it [a new line] ruins property values (no one wants a house near a line). |
| | ▪ Horseshoe Bend Road does not prefer the West Alternative or the Middle: would impact land values. |

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- ...(10016-037 continued) farming activities somewhat more difficult and irrigation systems may need to be reconfigured. The effects of EMF on the plant community has been studied by researchers, and based on that, no adverse effect on plant response due to the EMF levels produced by transmission lines has been found. This topic is discussed on page 47 of Appendix F in the EIS.
- 10016-038 Much of the project crosses land zoned in Klickitat County as Extensive Agriculture (see Section 5.25 of the EIS), which allows for 20-acre lots. The EIS acknowledged subdivided lots that are currently for sale, but did not speculate as to other farmlands that may be subdivided in the future.
- 10016-039 Comment noted.
- 10016-040 The proposed line would not preclude agro-tourism. The line would create visual impacts that are described in Section 3.2 of the EIS.
- 10016-041 Comment noted.
- 10016-042 The opinions of the commentor are noted. Transmission lines are needed to transmit high-voltage electricity. Much of the project area within Klickitat County has an energy overlay zone (see Map 5-1), which allows wind development.
- 10016-043 See response to comment #10016-042 and Section 5.25 of the EIS concerning consistency of the project with local plans and policies.
- 10016-044 BPA has requested landowner permission to cross properties in which BPA has no existing right-of-way or access, and has tried to inform landowners that staff will be in the area where existing access is present.
- 10016-045 Potential noise, including corona, impact are described in Section 3.11 of the EIS.
- 10016-046 Potential public health and safety issues, including EMF are described in Section 3.12 and Appendix F of the EIS.
- 10016-047 See response to comment #10016-046.
- 10016-048 See response to comment #10016-046.
- 10016-049 See response to comment #10016-046.
- 10016-050 See response to comment #10016-046.
- 10016-051 Please see response to comment #10009-007.
- 10016-052 Thank you for your comment. BPA identifies all existing utility crossing and takes them into account as it designs the line.
- 10016-053 Please see Section 3.9.2 of the EIS for the project's potential impacts on property values.

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| 10016-054 | <ul style="list-style-type: none">▪ How do you compensate owners impacted by proximity of the line when they are not in the right-of-way?▪ Will I be compensated for the impact to my view even though the easement is on my neighbors land? |
| 10016-055 | <ul style="list-style-type: none">▪ Who is benefitting from the towers on their property? |
| 10016-056 | <ul style="list-style-type: none">▪ Consider the importance of...the people who have long roots in the area. |
| 10016-057 | <ul style="list-style-type: none">▪ Want to know what aftereffect there will be once acquisition is made.▪ What kinds of effect will it be for county records and title company? (How will it impact)? |
| 10016-058 | <ul style="list-style-type: none">▪ The title information is outdated!▪ Auditor's office does not have a record of the Chenoweth-Goldendale right-of-way across my property. |
| 10016-059 | <ul style="list-style-type: none">▪ Can payments be spread out to lessen tax impacts?▪ The East Alternative crosses a private runway. |
| 10016-060 | <ul style="list-style-type: none">▪ Concerned about the Goldendale airport near the line.▪ Runway near tower 25/4, line in the way. |
| 10016-061 | <ul style="list-style-type: none">▪ What types of roads are required? |
| 10016-062 | <ul style="list-style-type: none">▪ I appreciate you locating towers in scabland. |
| 10016-063 | <ul style="list-style-type: none">▪ Local utilities have unjustifiably removed trees from my property.▪ Concerned with visual impact of substation from Knight Road.▪ People on the West Alternative already have a BPA line in their view: why is that an impact? Subdivision created after BPA existing line.▪ I have a view currently and don't want a transmission line in view.▪ Are you ok with ruining people's views?▪ Near E26, biggest issue is aesthetics—seeing the towers through the Hill's picture window —no draw there—full view for a 1/4 of a mile. |
| 10016-064 | <ul style="list-style-type: none">▪ East option would ruin the view of Mt. Hood and Mt. Adams while driving down Van Hoy Road.▪ Visual impact—impacts to existing line would be less than impacts of new right-of-way.▪ Consider the importance of beauty of the area.▪ It's not fair to be visually impacted by a new line...▪ Don't like the Middle and East alternatives because they will be eyesores. I like the West because it is behind my property: it doesn't bother me as much.▪ Looking at towers from home windows. |

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- 10016-054 Please see response to comment #10004-002.
- 10016-055 The underlying landowner would be compensated at fair market value for any easement acquired for the project.
- 10016-056 Thank you for your comment.
- 10016-057 Please see Appendix A of the EIS.
- 10016-058 Titles are ordered from title companies, documents would be filed in county records and final titles would be issued by title companies. BPA would order updates on any title report over six months old. When notification is given by a landowner that they no longer own a parcel, BPA would request an update to the title report.
- If there is no record of a right-of-way across your property, the BPA Realty Department would research and provide appropriate recording information and if requested, provide a copy of the easement if the requestor is the granting landowner on the easement.
- 10016-059 BPA would prefer to pay a lump sum; however, in extenuating circumstances, arrangements can be made for payments divided over a period of time.
- 10016-060 BPA transmission facilities are built to meet FAA requirements. The transmission line as currently planned has been discussed with the FAA, does not exceed obstruction standards, and would not be a hazard to air navigation for Goldendale Airport as it currently exists. Regarding the private runway, BPA is in discussions with the airstrip owner to determine ways to lessen impacts to airstrip use. Please See Section 3.10 of the EIS for a discussion of potential impacts to FAA-approved airports and private airstrips.
- 10016-061 Please refer to Section 2.3.4 for a description of the access roads for the project and Appendix B of this EIS for maps that show the proposed road locations.
- 10016-062 Comment noted.
- 10016-063 Comment noted.
- 10016-064 Visual impacts are a major concern of the public regarding the proposed project. Please see Section 3.2 of the EIS for a discussion of the impacts and photo simulations of the line.

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10016-064
continued

- Randal/Harms prefer the West Alternative because it will not be in their view.
- Prefer West Alternative due to the limited visual impacts and use of an existing alignment.

10016-065

- Use taller towers to help avoid visual and annoyance issues. Towers adjacent to property owners.

10016-066

- Concerned with substation storm water potential to impact Spring Creek.
- Keep sand/silts from flowing with running water.
- BPA culverts clog up and water flows over the land.

10016-067

- At tower 23/1 wetland evaluation?
- Wetland near E22...
- Owls and hawks between E20 and E21.
- Wetland near E22 with eagles, owls, and hawks.
- Effects on bald eagles.

10016-068

- What birds are studied: sensitive species? How do you determine if they are present? How many observations is your study based on? Does that apply to eagles?
- Did you observe eagles near the substation site?
- Concerned about impacts to eagles from the substation.
- Invasive to raptors: eagles, hawks, falcons, owls—that would be affected by the Knight substation.

10016-069

- EIS does not recognize the Knight Substation area as habitat.

10016-070

- Eagles migrate to other areas because of the electrical properties of the lines (other animals as well).

10016-071

- Does EMF affect wildlife...?

10016-072

- Is the PUD losing their back-up power?
- When is the decision going to be made?
- When will construction begin?

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- 10016-065 Taller towers generally tend to create more visual impact because they can be seen from greater distances and are more likely to stand above the horizon. In specific circumstances, taller towers could raise the line out of a certain view. For this project, if taller double-circuit towers are used, then an existing line would be removed, which might lessen the overall visual impact.
- 10016-066 BPA designs and constructs its facilities in accordance with the Stormwater Management Manual for Eastern Washington and in compliance with all applicable federal, state, and local regulations to control quality and quantity of stormwater runoff. BPA follows standard protocols that require, at a minimum, inspection and maintenance of stormwater systems annually.
- 10016-067 BPA has identified potential wetlands and designed routes to avoid or minimize impacts as much as possible. Specifically, the East Alternative has been redesigned to locate Tower 23/1 back on line to avoid potential impacts to wetlands.
- 10016-068 Wildlife specialists have done field work along all the action alternatives. Please see Section 3.6 of the EIS for a discussion about potential impacts to species and their habitats.
- 10016-069 The EIS recognizes that both substation sites provide cropland habitat.
- 10016-070 Please see Section 3.6.2 of the EIS for a discussion of potential EMF impacts to wildlife.
- 10016-071 If BPA decides to build the project and chooses the East Alternative (the Preferred Alternative), or the Middle Alternative, there would be no direct impacts on Klickitat County PUD's 115-kV system. Please see response to comment #10009-001 for information about potential implications for the power system and Klickitat County PUD if the West Alternative is selected.
- 10016-072 A decision concerning whether and how to proceed with the proposed project is expected in or around September 2011, and will be announced in a Record of Decision. If the decision is to proceed with project construction, some construction activities would begin in certain areas shortly after the release of the Record of Decision.

BEKD10017

Gaywood Paul

10017-001

Goldendale Resident. Both the middle and east alternatives would impact the future of the Goldendale Airport. The State of Washington a couple of years ago adopted FAA requirements for airports. These requirements demand more separation from buildings and roads on the east end of the runway thus Goldendale Airport will eventually have to be slid a quarter of a mile or more westward on a compass direction of 250 degrees toward Knight Rd. In addition, the runway needs to be lengthened another quarter of a mile to handle business aircraft. These conditions will have to be met in order to qualify for state/federal funding. Tall powerlines near Knight Rd. would present an approach hazard on the west end of the runway, thus impacting moving the airport west. Has this been discussed with the FAA, State Aeronautics and the City of Goldendale?

BEKD10018

Seth and Jennifer Armstrong

10018-001

My husband Seth and I moved to the area 3 years ago for his job. We fell in love with Centerville because of the school, community, and all of the open space with fields of hay and wheat, but most of all the view. The views from our house are amazing. We have views of Mt. Hood, Mt. St. Helen's and Mt. Adams, along with gorgeous sunsets. Our house is filled with the beautiful pictures we have taken from our property and part of the reason we chose this house. Then we get a letter from you telling us you want to put in huge towers and power lines that will obstruct that beautiful view. The joy of living out here is that you are away from the hustle and bustle of big city living and all that comes with it including giant ugly towers. Not only will our view be taken away, but our property value will be significantly decreased. The towers proposed in the middle alternative will feel as if they are in our backyard. It is bad enough that we can now see flashing red lights from our dining room window and not benefit from their income potential to have this thrown in the mix. In closing I hope you will take the middle alternative out of the running and save a beautiful view. Thank you, Seth and Jennifer Armstrong

10018-002

10017-001 Please see response to comment #10016-060.

10018-001 BPA recognizes that wherever the line route is located, it would impact someone's property and views. Potential impacts on land use are discussed in Section 3.1 of the EIS, and potential impacts on views in the project vicinity from each alternative are discussed in Section 3.2 of the EIS. Potential property value impacts are discussed in Section 3.9 of the EIS.

10018-002 Thank you for your comments, your preference has been noted.

BEKD10019

Dawn Stover

- 10019-001 | Please stick with the preferred route, i.e. the eastern route. That route will have the least impact on scenic vistas, wildlife, and public lands that are valuable for their natural resources and recreational opportunities. I am particular opposed to having
- 10019-002 | a huge transmission line go through the Dalles Mt. Ranch a.k.a. Columbia Hills State Park. This is a park where I frequently go to hike, birdwatch, observe wildflowers and enjoy the fresh air and splendor of a (relatively) untrammelled landscape. The construction of large wind projects has already irreparably altered the landscape and natural services of eastern Klickitat County. A giant
- 10019-003 | transmission line does further damage to scenic vistas, human health, soils, and flora and fauna. Confining such a transmission line to an existing corridor that
- 10019-004 | already has a road and impaired views is the best course of action if the Big Eddy-Knight line must be constructed. (I question the need for this transmission, which is being built to send power to California rather than to serve local needs, and
- 10019-005 | which will likely lead to the construction of fossil-fuel-fired power plants to "balance" the wind energy that has overwhelmed the regional hydropower system.)
-

BEKD10020

Will Bloch

- 10020-001 | Please route the transmission line and optical cable according to the Eastern Alternative. It minimizes the scenic and surface impacts on the portion of the Dalles Mountain with maximum scenic and wildlife (especially botanical) value. To people who do not know the Dalles Mountain well, it is just another bit of underpopulated, unproductive agricultural land. However, it is, in fact, an area of monumental scenery and diverse, dense native botany, home to at least two rare and beautiful wildflowers as well as hundreds of acres of dense and not so rare lupine and balsamroot. The spring bloom in this area is a national treasure and one of the most accessible and photographed vistas in the Pacific Northwest. This also a prehistoric and historic landscape, a vestige of the grandeur which confronted Lewis and Clark as they came down the Columbia River and interacted with a complex Native American culture which had settled, foraged, and traded here for untold centuries. The Eastern Alternative traverses the Dalles Mountain as far as possible (among the proposed alternatives) from the ridge's scenic and botanical core by routing the new power line along the WA Route 14 corridor, an already degraded environment. The only more preferable route is one the BPA has not
- 10020-002 | offered, which would cross the ridge close to US Route 97. A major effect of the wind farm explosion in the vicinity of Maryhill, Route 97, and Goldendale has been to transform a rural or primitive landscape into an industrial one. It is
- 10020-003 | important to contain the scenic damage as much as possible by concentrating impacts into the smallest possible area so that the remaining scenery and ground cover can remain unimpacted.

- 10019-001 Thank you for your comments. Potential impacts to Columbia Hills State Park and Natural Area Preserve are discussed in various sections of Chapter 3 of the EIS. Your alternative preference has been noted.
- 10019-002 See response to comment #10020-002.
- 10019-003 Comment noted. The potential impacts of the proposed transmission line are described and evaluated in Chapter 3 of the EIS, and the potential cumulative impacts of the proposed line in combination with cumulative wind project development in the area are discussed in Chapter 4 of the EIS.
- 10019-004 Comment noted.
- 10019-005 The need for the proposed project is described in Section 1.2 of the EIS. See response to comment #10015-001 concerning how the project would be used to help better move power throughout the project vicinity, the region, and possibly beyond. Finally, at this time, it is neither proposed nor expected that additional fossil-fuel generation plants would be developed to balance natural fluctuations in wind generation.
-
- 10020-001 Thank you for your comments. Potential impacts to Columbia Hills State Park and Natural Area Preserve are discussed in various sections of Chapter 3 of the EIS. Your alternative preference has been noted.
- 10020-002 As discussed in Section 2.6.4 of the EIS, a transmission line route crossing the Columbia River near US-97 was considered but eliminated from further study in the EIS. One of the major obstacles in line routing is river crossings. River crossings are very expensive, require tall towers, and are technically challenging. The two river crossing locations proposed with the action alternatives occur where the river is the narrowest. This is intentional to help keep river crossings to a reasonable size. It is also important to consider the terrain on either side of the river. Higher elevation terrain would help minimize tower heights. West of US-97 is a wide section of river to cross and little terrain elevation to take advantage of on either side of the river, which is not an attractive crossing location. East of US-97 is Maryhill State Park, which would be a difficult area to route through. We looked at a crossing further east, but continued to find river width, low elevation terrain, and tall tower issues. Section 2.6.4 of the EIS has been updated to better reflect these considerations.
- 10020-003 BPA tries to balance environmental impacts, both to the natural and human environment, with other technical requirements to determine the best course of action.

BEKD10021

Rick Ray

10021-001 | I live in the Columbia River Gorge NSA and am writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project.
If new transmission lines are absolutely necessary and there are no siting alternatives to avoid new transmission lines within the Scenic Area, then the BPA should select the eastern alternative and use underground transmissions lines within the Scenic Area viewshed.

BEKD10022

David Shaprio

10022-001 | I hope BPA will pick a route with the least impact on the Columbia Gorge. If lines have to be run within the Gorge, they should be underground. If the BPA picks one of the proposed routes, it should be the eastern route, which runs along an existing easement. Power lines visible from within the Gorge Scenic Area diminish the beauty of the area.

BEKD10023

Jeff Lawton

10023-001 | I have no problem with BPA's plans for the Big Eddy-Knight Transmission Project. Opposition to this project is coming from the usual NIMBYs who oppose any and all development within a whisper of the Gorge. I recognize the need to continue to upgrade and add to our electrical infrastructure and, although I frequently hike in the Columbia Gorge, I can accept that some sacrifices are necessary.
Regards,
Jeffrey Lawton

BEKD10024

Jackie Johnson

10024-001 | Regarding the Big Eddy-Knight Transmission Project:
The western and middle alternatives should be avoided because of impacts on the state park, natural area preserve, Columbia Hills "Important Bird Area," rare plant habitat, oak woodlands listed as critical habitat in Washington State, and endangered species habitat. The western route would pass through the National Scenic Area, Columbia Hills State Parks and Columbia Hills Natural Area Preserve.
The eastern route is most acceptable, unless there are other alternatives that do not impact the Scenic Area at all.
Thank you for the opportunity to comment.
jackie johnson

- 10021-001 Your preference is noted. Please see Section 2.6.3 of the EIS regarding issues with undergrounding the transmission line.
- 10022-001 BPA has tried to minimize visual impacts of the transmission line through the National Scenic Area and elsewhere along the project by proposing the following: alternatives that use existing visually impacted corridors, rebuilding existing lines to combine lines to one set of transmission line towers, crossing the Columbia River in locations that already have a transmission line crossing, designing towers as short as possible so as to avoid tower lighting, treating the finish of the steel towers so they are not as bright and shiny, locating new corridors in ravines, using existing roads where possible and following terrain when locating new access roads, avoiding houses to the extent possible, and placing Knight Substation inland from Knight Road. Please see Section 2.6.3 of the EIS regarding issues with undergrounding the transmission line.
- 10023-001 Your comments are noted. Thank you.
- 10024-001 Thank you for your comments. Potential impacts to Columbia Hills State Park and Natural Area Preserve are discussed in various sections of Chapter 3 of the EIS. Your alternative preference has been noted.

BEKD10027

Judy Jordan

- 10027-001 We are writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project and its potential impacts on the Columbia River Gorge, a place we care about. We have recently moved to Oregon from Texas (where not one gives a darn about the scenery). We think that the The Columbia River Gorge National Scenic Area an incredible area. We are amazed at the scenic views every time we drive I-84 or Hwy 14 in Washington. We are concerned that this project is proposed within a National Scenic Area and that there is likelihood of adverse effects resulting from each one of the action alternatives. We feel that the BPA should extend the comment period to 90 days. The BPA should also hold hearings in major population areas like the
- 10027-002 Portland/Vancouver metro area so that the public has an adequate opportunity to review and comment on this project, since the project's direct and indirect impacts could affect the entire region.
- 10027-003 The BPA's DEIS fails to consider alternatives that avoid siting new transmission lines within the National Scenic Area. The DEIS also fails to adequately consider alternatives that would place underground all or portions of new transmissions lines within the Scenic Area. The National Scenic Area Management Plan (M.P.) requires new power lines to be underground, unless it can be demonstrated to be impracticable. (M.P. Page I-1-10) "Practicable" is defined as "able to be done, considering technology and cost." (M.P. Glossary-14) Clearly, the BPA is able to place the lines underground and should, considering the proposed alternatives are located within a congressionally designated National Scenic Area.
- 10027-004 Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National Environmental Policy Act and the National Scenic Area Act. However, the eastern route follows an existing power line easement through the Scenic Area and appears to have less impacts than the middle and west alternatives.
- 10027-005 The western and middle alternatives should have been dropped from consideration during the "scoping" phase of environmental review. These routes are near or within a state park, a natural area preserve, the Columbia Hills "Important Bird Area," rare plant habitat, oak woodlands listed as critical habitat in Washington State, and endangered species habitat. The western route would pass through the National Scenic Area, Columbia Hills State Parks and Columbia Hills Natural Area Preserve, resulting in egregious impacts to scenic, natural, cultural and recreation resources.
- 10027-006 As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines should be placed underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.
- 10027-007
- 10027-008

- 10027-001 Thank you for your comments. BPA recognizes the intent of the National Scenic Area designation as well as the beauty of the Columbia Gorge. Potential impacts to the National Scenic Area are addressed in Sections 3.1, 3.2, 3.4, 3.5, and Chapter 7 of the EIS.
- 10027-002 Comment noted. BPA provided a 49-day formal public review and comment period for the Draft EIS, as calculated from publication of the Notice of Availability of the Draft EIS in the Federal Register on December 10, 2010 to the close of the comment period on January 28, 2011. Though BPA did not extend this comment period, BPA nonetheless continued to accept comments after the close of the comment period, and has included and responded to these additional comments in the final EIS to the extent that time allowed. In addition, BPA held two public meetings in the vicinity of the proposed project – one in The Dalles, Oregon, and the other in Goldendale, Washington – during the draft EIS comment period to further explain the project and receive public comments on the draft EIS. In addition to actually being in the area that would be affected by the proposed project, these meeting locations were sufficiently close to the Portland/Vancouver metropolitan area (about a 90- to 120-minute drive) to allow anyone from the metro area who wished to attend to do so. Furthermore, as discussed in Chapter 10 of the EIS, BPA mailed a copy of the draft EIS or notice of its availability to a wide variety of agencies, Tribes, interest groups, businesses, and people throughout the region. Finally, to ensure wide availability of the draft EIS, BPA posted the complete draft EIS on the BPA Web site at the beginning of the draft EIS comment period and provided contact information at BPA for requesting a hard copy of the draft EIS. Accordingly, BPA believes that it has provided adequate opportunities for anyone interested to review and comment on the draft EIS, and that this approach fully complies with NEPA requirements.
- 10027-003 Because one endpoint of the proposed transmission line would be BPA's existing Big Eddy Substation that is already located within the National Scenic Area, complete avoidance of the National Scenic Area would be impossible. Nonetheless, BPA did consider alternatives that would largely avoid the National Scenic Area by routing the proposed line generally in locations to the south of the National Scenic Area. However, these alternatives were eliminated from detailed evaluation in the EIS. The rationale for the elimination of these alternatives from further consideration is provided in Section 2.6.4 of the EIS.
- 10027-004 Undergrounding the transmission line was considered but eliminated from detailed study due to the high environmental impacts from digging trenches along the length of the routes, placing 30-foot-long by 10-foot-deep manholes every 1,500 to 1,800 feet, adding 4- to 5-acre transition stations where lines would transition from overhead to underground, as well as with the difficulties of maintaining underground high-voltage lines, and because undergrounding a high-voltage transmission lines costs about 10 times that of an equivalent overhead line, a cost that would be passed on to ratepayers. Please see Section 2.6.3 of the EIS for a more detailed discussion about undergrounding the transmission line.
- 10027-005 As is consistent with the National Environmental Policy Act, the EIS analyzes the potential impacts of the range of alternatives for the proposed project. BPA is working to be consistent with the National Scenic Area Management Plan.
- 10027-006 *Continued on the next odd page...*

BEKD10028

Linda Starr

- 10028-001 | Of what value is it to designate areas as having value for their scenic beauty if projects such as this one are even allowed to be put into motion. Are you serious? Why do you even put forth the financial resources to design a plan that assaults the unique values of the Gorge? I cannot believe that everyone on this project agrees that this is the right thing to do. Put your vast resources and good minds together to create a plan that honors the amazing value that the Columbia River Gorge area is.
- 10028-002 | As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines
- 10028-003 | should be placed underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.
linda starr

- 10027-006 Comment noted. Chapter 3 of the EIS describes the potential impacts of the West and Middle alternatives on specially designated areas as well as scenic, natural, cultural, and recreational resources in the project vicinity. BPA believes it was appropriate to include the West and Middle alternatives in the EIS to allow for an evaluation of these alternatives in detail, and to provide a reasonable range of alternatives for consideration in agency decision-making for the proposed project.
- 10027-007 Please see response to comment #10027-003.
- 10027-008 Please see response to comment #10027-004. Thank you for your comments.

- 10028-001 BPA recognizes the scenic beauty and unique value of the National Scenic Area and the Columbia Gorge. Options to avoid the Gorge were considered and BPA has worked to lessen possible visual impacts (please see response to comment #10022-001). A large portion of the Middle and West alternatives would use existing BPA right-of-way through the National Scenic Area, and all of the East Alternative (BPA's Preferred Alternative) would use existing BPA right-of-way through the National Scenic Area. The existing rights-of-way contain one to two lines with wood pole or lattice-steel towers that have been in place for over 50 years; using these corridors would greatly reduce potential impacts.
- 10028-002 Please see response to comment #10027-003.
- 10028-003 Please see response to comment #10027-004.

BEKD10029

Laurie Balmuth

- 10029-001 | The Columbia Gorge National Scenic Area is not very large, but it is unique and must be preserved. The new power line route violates the visual integrity of the NSA and should not be used. The Old power line route has less impact. If new transmission lines are absolutely necessary and there are no siting alternatives to avoid new transmission lines within the Scenic Area, then the BPA should select the eastern alternative and use underground transmissions lines within the Scenic Area viewshed. Finally, the BPA must eliminate the western and central alternatives, which cross a state park, Columbia Hills Natural Area Preserve and critical oak woodlands habitat that is essential for threatened species.
- 10029-002 |
- 10029-003 |
- 10029-004 | It is important to respect the Scenic Area. It is a unique natural treasure that can never be replaced.

Laurie Lyman Balmuth

Hood River, Oregon

- 10029-005 | I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project and its potential impacts on the Columbia River Gorge, a place I care about protecting for future generations to enjoy.

- 10029-006 | The Columbia River Gorge National Scenic Area is a spectacular area, recognized by Congress for its unparalleled scenic vistas and outstanding natural landscapes. Because the project is proposed within a National Scenic Area and there is a substantial likelihood of adverse effects resulting from each one of the action alternatives, the BPA should extend the comment period to 90 days. The BPA should also hold hearings in major population areas like the Portland/Vancouver metro area so that the public has an adequate opportunity to review and comment on this project, since the project's direct and indirect impacts could affect the entire region.

- 10029-007 | The BPA's DEIS fails to consider alternatives that avoid siting new transmission lines within the National Scenic Area. The DEIS also fails to adequately consider alternatives that would place underground all or portions of new transmissions lines within the Scenic Area. The National Scenic Area Management Plan (M.P.) requires new power lines to be underground, unless it can be demonstrated to be impracticable. (M.P. Page I-1-10) "Practicable" is defined as "able to be done, considering technology and cost." (M.P. Glossary-14) Clearly, the BPA is able to place the lines underground and should, considering the proposed alternatives are located within a congressionally designated National Scenic Area.

- 10029-008 |
- 10029-009 | Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National Environmental Policy Act and the National Scenic Area Act. However, the eastern route follows an existing power line easement through the Scenic Area and appears to have less impacts than the middle and west alternatives.

10029-001 Please see response to comment #10028-001.
10029-002 Please see response to comment #10022-001.
10029-003 Please see response to comment #10027-006.
10029-004 Comment noted.
10029-005 Please see response to comment #10027-001.
10029-006 Please see response to comment #10027-002.
10029-007 Please see response to comment #10027-003.
10029-008 Please see response to comment #10027-004.
10029-009 Please see response to comment #10027-005.

- 10029-010 | The western and middle alternatives should have been dropped from consideration during the "scoping" phase of environmental review. These routes are near or within a state park, a natural area preserve, the Columbia Hills "Important Bird Area," rare plant habitat, oak woodlands listed as critical habitat in Washington State, and endangered species habitat. The western route would pass through the National Scenic Area, Columbia Hills State Parks and Columbia Hills Natural Area Preserve, resulting in egregious impacts to scenic, natural, cultural and recreation resources.
- 10029-011 | As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines
- 10029-012 | should be placed underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.

Laurie Balmuth

10029-010 Please see response to comment #10027-006.
10029-011 Please see response to comment #10027-003.
10029-012 Please see response to comment #10027-004.

BEKD10030

Camille Hall

- 10030-001 | It is inexcusable that the Draft Environmental Impact Statement includes no alternative sitings that would place the transmission lines outside of the sight-lines of the Scenic Area.
- 10030-002 | The National Scenic Area Management Plan (M.P.) requires new power lines to be underground, unless it can be demonstrated to be impracticable. (M.P. Page I-1-10) "Practicable" is defined as "able to be done, considering technology and cost." (M.P. Glossary-14).
- 10030-003 | Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National Environmental Policy Act and the National Scenic Area Act.
- 10030-004 | As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines should be placed underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.
- 10030-005 |

Camille Hall

BEKD10031

D. Deloff

- I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project.
- 10031-001 | Because the project is proposed within a National Scenic Area and there is a substantial likelihood of adverse effects resulting from each one of the action alternatives, I believe that the BPA should extend the comment period to 90 days.
- 10031-002 | The BPA should also hold hearings in major population areas like the Portland/Vancouver metro area so that the public has an adequate opportunity to review and comment on this project.
- 10031-003 | The BPA's DEIS fails to consider alternatives that would avoid siting new transmission lines above ground within the National Scenic Area.
- 10031-004 | The BPA is able to place the lines underground and should, considering the proposed alternatives are located within a National Scenic Area.
- 10031-005 | Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National Environmental Policy Act and the National Scenic Area Act. However, the eastern route follows an existing power line easement through the Scenic Area and appears to have less impacts than the middle and west alternatives.
- 10031-006 | As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area.
- 10031-007 | If the eastern route is selected, then the transmission lines should be placed underground in order to comply with the National Scenic Area Act.
- 10031-008 | Thank you for the opportunity to comment.
- 10031-009 | D. Deloff

10030-001 Please see response to comment #10027-003.
10030-002 Please see response to comment #10027-004.
10030-003 Please see response to comment #10027-005.
10030-004 Please see response to comment #10027-003.
10030-005 Please see response to comment #10027-004.

10031-001 Please see response to comment #10027-002.
10031-002 Please see response to comment #10027-003 regarding avoiding the National Scenic Area. Please see responses to comments #10027-004 and #10027-008 regarding undergrounding the proposed transmission line.
10031-003 Please see response to comment #10027-005.
10031-004 Please see response to comment #10027-003.
10031-005 Please see response to comment #10027-004.

BEKD10032

Joe Ullman

- 10032-001 | Please use the eastern corridor for the new power line, and use underground burial thru the gorge. There's enough eyesores in this world. In an area dedicated to scenic views for our enjoyment, surely we can spend more for a good reason, in this time of crazy costs for bad causes. Joe Ullman, former BPA employee
Joe Ullman
-

BEKD10033

Joan Carter

- 10033-001 | Please ensure that hearings for this are held in the Portland/Vancouver metro area, Salem, and the western suburbs of Portland since the project's impacts will certainly affect the entire region.
10033-002 | Please commit to a route that avoids Gorge NSA, and place lines underground!
Thank you for the opportunity to comment.
Joan Carter
-

BEKD10034

Aaron Dukes

- 10034-001 | Please don't ruin the view!
Aaron Dukes

10032-001 Your preference for the East Alternative is noted. Also, please see responses to comments #10027-004 and 10028-001.

10033-001 Please see response to comment #10027-002.

10033-002 Please see responses to comments #10027-003 and #10027-004.

10034-001 Please see response to comment #10028-001.

BEKD10035



KLICKITAT COUNTY
BOARD OF COUNTY COMMISSIONERS



205 S. COLUMBUS AVENUE, ROOM 103, MS-CH-04, GOLDDALE WASHINGTON 98620 • FAX 509 773-6779 • VOICE 509 773-4612
REX F. JOHNSON, DISTRICT #1
DAVID M. SAUTER, DISTRICT #2
RAY THAYER, DISTRICT #3

January 28, 2011

Bonneville Power Administration
Attn: Stacy Mason, Environmental Coordinator
Public Affairs Office, DKE-7
P.O. Box 14428
Portland, Oregon 97293-4428

RE: Big Eddy-Knight Transmission Project
Draft Environmental Impact Statement - Comment

Dear Ms. Mason:

Klickitat County provides this comment on the Big Eddy-Knight Transmission Project Draft Environmental Impact Statement ("Draft EIS"). The Project is proposed for location primarily in Klickitat County. As the host county, the proposed Project will impact Klickitat County to a far greater degree than any other local jurisdiction. However, consultation with the County during development of the Draft EIS has not occurred. As a consequence, the Draft EIS mischaracterizes certain local conditions and mitigation is inadequately defined. While the County understands the need for increased transmission capacity, Klickitat must be consulted to ensure a better understanding of local conditions.

1. Introduction

With over 1,000 megawatts of wind development in operation, Klickitat County recognizes the importance of ensuring development of an adequate distribution network. However, before transmission expansion can occur, baseline conditions and local impacts must be adequately assessed. With this comment, Klickitat County makes three requests. First, there must be inter-agency consultation to correct the mischaracterizations of the Draft EIS. Second, the EIS must adequately account for local conditions. Third, appropriate mitigation must be identified to address local impacts, whether those impacts be the loss of the most fertile farmland in Klickitat County, or impacts on our residents, whether they live in more rural areas of the County, or in Goldendale.

2. Consultation

Public input and local agency consultation is a fundamental tenet of both the National and State Environmental Policy Acts. Not only is this input legally required, but the lack of it can lead to a document which does not accurately reflect local and baseline conditions. Klickitat County requests that BPA meet with the Planning Department, and Commissioners, to ensure the EIS reflects a deeper understanding of baseline conditions within the County, and adequately addresses mitigation alternatives.¹

¹ A preliminary meeting with County staff occurred on June 8, 2009, but consultation to ensure the environmental review accurately addresses local conditions has not yet occurred.

10035-001

10035-002

- 10035-001 BPA appreciates Klickitat County's comments on the draft EIS. Specific issues raised are addressed below in responses to more detailed comments on these issues. BPA met with Klickitat County staff and a county commissioner early in the project scoping phase, and environmental consultants researching and conducting environmental analysis for the project met with planning staff during the analysis phase of the project. BPA has met with the commissioners since the receipt of this letter and continues to coordinate with the county to address issues.
- 10035-002 In preparing the EIS for the proposed project, BPA has conducted extensive outreach to the public in general as well as state, regional, and local agencies, Tribes, interest groups, and others. This outreach has been conducted to, among other things, provide notification of the proposed project, gather environmental and other information, and allow for meaningful input on the EIS. Chapter 1 of the EIS summarizes the public involvement activities conducted by BPA as part of the EIS process. Through these activities, project surveys, and other data gathering, BPA believes that it has a sufficient understanding of existing environmental conditions and appropriate potential mitigation, which have been reflected in the EIS. Furthermore, BPA believes that its coordination with Klickitat County concerning the proposed project and EIS comports with NEPA requirements, and we are continuing to work with Klickitat County to ensure their concerns and issues are understood and sufficiently captured in the NEPA process.

3. Impact Assessment

NEPA requires an accurate assessment of existing conditions. There are several issues which need further analysis and attention.

- 10035-003 • Agricultural. While all alternatives would have some impact on farming and ranching activities, the Central and East Alternatives would cross some of the highest quality soils in the County and cause the greatest degree of impact on farming activities. Much of the West Alternative crosses poor grazing ground. While there is some information on these impacts in the Draft EIS, the analysis does not reflect an accurate understanding of soil conditions and irrigation practices. Local consultation and better defined mitigation would help address this concern.
- 10035-004 • Aesthetics. Klickitat County is located within a setting of great aesthetic value. Yet, the Draft EIS does not fully appreciate the distinct aesthetic impacts associated with each alternative. Of particular concern, the Draft EIS understates impacts on residents of Goldendale and the surrounding area, which has a population in excess of 3,500 and is developing at a rate that exceeds that of Wishram. In contrast, much of the Western Alternative would cross areas that are primarily grazing ground, not subdivided (except for an undeveloped large-lot subdivision cited in the Draft EIS), and are slow growing, due in part to lack of roads, and distance to Goldendale or other city service areas. In addition, the Draft EIS does not adequately address Highway 97 from Goldendale to the Maryhill Grade, with its views of the mountains to the west. Highway 142 is a scenic/recreational highway that runs under all three alternatives, but the views from this road are similarly not adequately considered. These features, including the Maryhill Museum and the destination wineries immediately west of the museum, are important to the County for both economic development and historical reasons.
- 10035-005
- 10035-006 • Noise. The noise impacts analysis does not adequately address background noise. As with farming and aesthetic impacts, a better understanding of population concentrations and local conditions would assist with this.
- 10035-007 • Transportation. Transportation impacts are not addressed in adequate detail, as discussed below.

The County urges local consultation on these issues, as it would improve EIS analysis of existing conditions and likely impacts.

4. Mitigation

An EIS must identify mitigation alternatives and adequate information to enable an accurate assessment of alternatives and ensure informed decision-making. Examples of mitigation measures which must be further defined include:

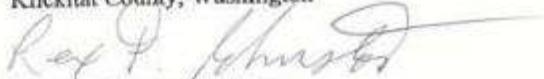
- 10035-008 • Farming/Ranching. Measures to mitigate impacts to farming and ranching, including irrigation, must be better identified, following local consultation. The County appreciates identification of compensation as mitigation should reconfiguration of irrigation systems due to placement of towers/access roads be required. However, property owners should be fully compensated for damage to their overall farming/ranching operation, and there should be an adequate understanding of those impacts.

- 10035-003 The EIS acknowledges that the East and Middle alternatives cross a greater amount of land being used for farming than does the West Alternative. Prime Farmland and Farmland of Statewide Importance are designations that were determined using soil survey data obtained from the US Department of Agriculture's Natural Resource Conservation Service (NRCS). This data is available on a county-by-county basis and identifies which soil units within the county are classified by the USDA as Prime Farmland or Farmland of Statewide Importance. Impacts on these soil categories were calculated in the same manner as impacts on all other environmental resources. The EIS acreages of impact on Prime Farmland and Farmland of Statewide importance do not reflect the actual usage of the land, as the county classifications do not consider land use or irrigation.
- Irrigated farmland was first identified through aerial photography interpretation. However, this was ultimately found to be insufficient due to the time of year in which the aerial photographs were taken. As a result, field surveys were undertaken during spring. Areas identified from aerial photographs as being cropland were visually inspected from adjacent roadways for irrigation devices or signs of their recent use. Areas observed to be irrigated or that exhibited signs that irrigation structures had recently been used on the property (tire tracks from line sprayers, hoses, etc.) were noted and identified in our analysis.
- The local Farm Bureau was also contacted and asked whether they kept records of the crops grown by property owners in the area, because this would help identify irrigated areas. The Farm Bureau could not provide this information because of their landowner privacy policy.
- 10035-004 Section 3.2 of the EIS analyses visual impacts to houses within 800 feet of the proposed transmission line and more distant residential centers. The section has been revised to more clearly acknowledge potential visual impacts to the City of Goldendale, including nearby areas with general rural 5-acre lot zoning.
- 10035-005 Section 3.2 of the EIS has been revised to more explicitly acknowledge visual impacts of the proposed project from US-97 and SR-147.
- 10035-006 BPA believes that Section 3.11 of the EIS adequately describes the noise levels that could be expected during construction activities and the corona noise levels that could be expected during operation of the proposed project.
- 10035-007 Please see response to comment #10035-011.
- 10035-008 Section 3.1 of the EIS describes the impacts that could occur to farming activities, both during project construction and for the life of the proposed project. During preliminary design activities, BPA has been working with individual landowners to determine appropriate line and road locations that would have the least impact on land use. As described in Section 3.9 of the EIS, the appraisal process takes all factors affecting property value into consideration to determine appropriate compensation. After discussions with the local NRCS office in Goldendale, BPA has added a mitigation measure to Section 3.1.3 to help protect productivity of agricultural soil around tower construction areas.

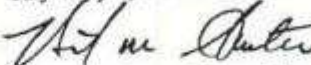
- 10035-009 • Setbacks/Corridor Location Adjustments. The Draft EIS states that all three alternatives will be within 500 feet of 10-12 residences/businesses, but does not address minimum setbacks, to mitigate visual and noise impacts from both construction and operation.
- 10035-010 • Partial Undergrounding. While undergrounding the entire transmission line is rejected on economic grounds, there is no discussion of limited use of undergrounding (and the costs associated with same) in areas with the highest potential impacts.
- 10035-011 • Transportation. Klickitat County Public Works has not been consulted regarding impacts to the County's transportation system. The County has insufficient information on load weights, haul routes, and timing of transport (which can be a significant issue during the winter months). The document does acknowledge road upgrades will be required, but lacks specifics on which roads would be upgraded, and the standards to which the improvements would be made, to ensure against damage to public infrastructure.
- 10035-012 **5. Conclusion**
With inter-agency consultation, adequate discussion of impacts and mitigation, the Big Eddy Knight Transmission Project Draft EIS would better address both NEPA requirements and host county concerns.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
Klickitat County, Washington


Rex F. Johnston, Chairman


Ray Thayer, Commissioner


David M. Sauter, Commissioner

cc: Klickitat County Prosecutor Lori Lynn Hctor
Planning Director Curt Dreyer

- 10035-009 The right-of-way width (150 feet, or 75 feet to either side of the center of a tower), is the set-back requirement necessary for the proposed 500-kV transmission line.
- 10035-010 Please see Section 2.6.3 of the EIS and response to comment #10027-004 regarding the reasons why undergrounding was considered but eliminated from detailed study in the EIS.
- 10035-011 See Section 2.4 of the EIS for a description of road upgrades likely required and Section 3.10 of the EIS for discussions about potential impacts on county roads during construction. BPA is working with Klickitat County to ensure the county's concerns are adequately reflected in BPA's construction specifications. BPA's owners engineer (HDR, Inc.) has contacted the county to discuss the project and receive the county's detailed requirements. The initial meeting between HDR and the county took place on February 10, 2011. Also on February 10, 2011 and April 21, 2011, several BPA project team members participated in a working session of the Klickitat County Commission to improve the team's understanding of the county's concerns and interests. BPA will pay close attention to the county's needs and will continue its coordination efforts.
- 10035-012 Thank you for your comments.

BEKD10036



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
620 SW Main Street, Suite 201
Portland, Oregon 97205-3026



9043.1
IN REPLY REFER TO:
ER10/1080

Electronically Filed

January 27, 2011

Stacy Mason
Environmental Coordinator
Bonneville Power Administration – KEC -4
P.O. Box 3621
Portland, Oregon 97208

Dear Ms. Mason:

The U.S. Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the Big Eddy-Knight Transmission Project, Wasco County, Oregon and Klickitat County, Washington. The Department offers the following comments for use in developing the Final Environmental Impact Statement for the project.

The scale of the maps provided and the level of detail regarding property ownership provided in the DEIS makes it difficult to determine if the project may have the potential to convert lands that are protected by section 6(f)(3) of the Land and Water Conservation Fund Act (LWCF) in Washington State and/or Oregon. It appears from the information that is available that this may be the case. If such a conversion does occur, it would require National Park Service (NPS) approval in advance, and it would be considered a federal action for NPS. It would also be very important that Bonneville Power Administration coordinate its activities relevant to the LWCF properties with the NPS and relevant state partners, such as the Recreation and Conservation Office.

For further information regarding Washington State LWCF issues, please contact:
Heather Ramsay, Project Manager
National Park Service, Community Assistance Programs
909 First Avenue, Seattle, WA 98104-1060
206.220.4123 - www.nps.gov/lwcf

For further information regarding Oregon LWCF issues, please contact:
Gloria Shinn
LWCF/UPARR Project Manager

10036-001

10036-001 As confirmed by a National Park Service (NPS) Land and Water Conservation Fund Act (LWCF) Project Manager, none of the proposed action alternatives would impact lands protected by section 6(f)3 of the LWCF.

National Park Service
Pacific West Region
909 1st Ave, 5th Floor
Seattle, WA 98104-1060

10036-002 |

Thank you for the opportunity to review and comment on this DEIS. If you have any other questions, please contact me at (503) 326-2489.

Sincerely,

A handwritten signature in cursive script that reads "Allison O'Brien".

Allison O'Brien
Acting Regional Environmental Officer

10036-002 Thank you for your comment.

BEKD10037

Joan Chantler

- 10037-001 | I recommend the eastern most route for the transmission line. The Dalles Mountain Ranch has extraordinary wild flowers, and it is part of a state park. I am a teacher at Wishram School, and we have used this area for field trips with our Secrets program. Please protect this special and pristine area. Thank you!

BEKD10038

Charles Gadway

- 10038-001 | I support the easternmost alignment. It makes the least impact on the spectacular Dalles Mt. scenery and wildlife.

BEKD10039

C. William & Meredith Savery

- 10039-001 | I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project and its potential impacts on the Columbia River Gorge, a place I care about protecting for future generations to enjoy. I am a resident of Portland, OR having been here for 31 years. Every year I spend several days hiking in the Columbia Gorge, kayaking on the Columbia River, visiting the towns, the natural sights and areas of the Columbia Gorge. It is an absolutely unique area which has been designated by Congress as a National Scenic Area.
- 10039-002 | The Columbia River Gorge National Scenic Area is a spectacular area, recognized by Congress for its unparalleled scenic vistas and outstanding natural landscapes. Because the project is proposed within a National Scenic Area and there is a substantial likelihood of adverse effects resulting from each one of the action alternatives, the BPA should extend the comment period to 90 days. The BPA should also hold hearings in major population areas like the Portland/Vancouver metro area so that the public has an adequate opportunity to review and comment on this project, since the project's direct and indirect impacts could affect the entire region.
- 10039-003 | The BPA's DEIS fails to consider alternatives that avoid siting new transmission lines within the National Scenic Area. The DEIS also fails to adequately consider alternatives that would place underground all or portions of new transmissions lines within the Scenic Area. The National Scenic Area Management Plan (M.P.) requires new power lines to be underground, unless it can be demonstrated to be impracticable. (M.P. Page I-1-10)
- 10039-004 | "Practicable" is defined as "able to be done, considering technology and cost." (M.P. Glossary-14) Clearly, the BPA is able to place the lines underground and should, considering the proposed alternatives are located within a congressionally designated National Scenic Area.
- 10039-005 | Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National Environmental Policy Act and the National Scenic Area Act. However, the eastern route follows an existing power line easement through the Scenic Area and appears to have less impacts than the middle and west alternatives.

10037-001 Thank you, your preference has been noted.

10038-001 Thank you, your preference has been noted.

10039-001 Please see response to comment #10027-001.

10039-002 Please see response to comment #10027-002.

10039-003 Please see response to comment #10027-003.

10039-004 Please see response to comment #10027-004.

10039-005 Please see response to comment #10027-005.

- 10039-006 | The western and middle alternatives should have been dropped from consideration during the "scoping" phase of environmental review. These routes are near or within a state park, a natural area preserve, the Columbia Hills "Important Bird Area," rare plant habitat, oak woodlands listed as critical habitat in Washington State, and endangered species habitat. The western route would pass through the National Scenic Area, Columbia Hills State Parks and Columbia Hills Natural Area Preserve, resulting in egregious impacts to scenic, natural, cultural and recreation resources.
- 10039-007 | As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines should be placed
- 10039-008 | underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.
-

10039-006 Please see response to comment #10027-006.
10039-007 Please see response to comment #10027-003.
10039-008 Please see response to comment #10027-004.

BEKD10040



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

January 21, 2011

Ms. Stacy Mason – KEC-4
Project Environmental Lead
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Re: U.S. Environmental Protection Agency (EPA) comments on the Draft Environmental Impact Statement for the Big Eddy-Knight Transmission Project (EPA Project Number 09-030-DOE)

Dear Ms. Mason:

The U.S. Environmental Protection Agency (EPA) has reviewed the Bonneville Power Administration (BPA) Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project in Wasco County, Oregon and Klickitat County, Washington in accordance with the National Environmental Policy Act (NEPA) and §309 of the Clean Air Act (CAA). Section 309 of the CAA requires EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures, we also evaluate the document's adequacy in meeting NEPA requirements.

The DEIS analyzes potential environmental impacts associated with a proposal to construct, operate, and maintain a 500-kV transmission line that would extend from BPA's Big Eddy Substation near The Dalles, Oregon to a proposed Knight Substation approximately 4 miles northwest of Goldendale, Washington. The project also includes installation of new fiber optic cable for system communications. The DEIS analyzes three routing alternatives for the transmission line (West, Middle, and East). The DEIS also analyzes two sites for the proposed Knight substation, and two fiber optic cable configurations. The East alternative is identified as the preferred alternative.

EPA is supportive of the selection of the East Alternative as it minimizes impact to the Columbia Gorge National Scenic Area, and terrestrial vegetation. We appreciate the effort made by BPA to utilize existing corridors and to minimize impacts to sensitive resources in the project area. We favor the installation of double circuit towers and the removal of existing towers where feasible. This would limit the overall right-of-way requirements of the project; the visual impact of the project; and exposure to electro-magnetic frequencies.

Based on our analysis, we are assigning a rating of LO (lack of objections) to the DEIS. We do, however, have recommendations related to invasive species management and end-of-life issues for existing infrastructure that we believe should be addressed in the FEIS. These recommendations are detailed below:

10040-001

10040-001 Thank you for reading the EIS and providing your rating. Your preference for the Preferred Alternative has been noted.

Invasive Species

The DEIS notes on page 3-60 that a number of aggressive invasive species are present along the project alternative routes. In order to lessen the risk of introducing or spreading noxious weeds during and after construction and throughout the life of the line, the DEIS lists several mitigation measures, including (1) a commitment to conduct invasive weed surveys prior to and following construction to determine potential weed spread and appropriate corrective action; and (2) a commitment to collaborate with the Klickitat County Weed Board or Wasco County Weed Department and landowners to determine and carry out the best control measures deemed locally effective. These are important and necessary actions, and we believe they warrant further discussion. As the FEIS is developed, we encourage you to provide additional detail related to both of these measures, or to make an Early Detection Rapid Response Plan (EDRR) available for review on the BPA website or as an appendix to the FEIS. Key elements include the following:

10040-002

- Timing and frequency of invasives monitoring
- Active and passive monitoring protocols
- Who will be responsible for monitoring
- Who will be responsible for weed treatment/removal
- Treatment options (hand pulling, mowing, cultural controls, biological controls, herbicide)
- A decision key that can help managers determine appropriate treatment options (based on the size, location and nature of the infestation).

An example of an EDRR strategy and decision key can be found in the FEIS and Record of Decision for the Mt. Hood National Forest and Columbia River Gorge National Scenic Area in Oregon. These documents are available at <http://www.fs.fed.us/r6/invasiveplant-eis/site-specific/MTH/>

Existing Infrastructure

The East Alternative proposes to remove the existing towers along the Harvalum-Big Eddy line and the McNary-Ross line. We favor this approach, but recognize that deconstruction will be a significant activity and that it will generate a large surplus of material. We appreciate the inclusion of a mitigation measure calling for a plan to recycle or salvage non hazardous construction and demolition debris (DEIS p. 3-169), but recommend that additional detail be included in the FEIS related to materials management (amount of material to be generated, nature of that material, and alternatives for staging and disposal). How deconstruction materials are managed will determine in large part the overall resource intensity of the proposed project. We further recommend that the FEIS discuss targets for percent of materials to be salvaged or recycled.

10040-003

- 10040-002 The mitigation section for vegetation (Section 3.3.3 in the EIS) has been revised to describe an Early Detection Rapid Response Plan that would be prepared to control noxious weeds.
- 10040-003 BPA would add a statement to the supplemental technical specifications for the construction of the Big Eddy-Knight transmission line that would designate that all removed materials would become the property of the construction contractor. This would include about 14 miles of lattice-steel transmission line along with about 142,000 feet of Pheasant conductor and about 79,000 feet of Chukar conductor from the Harvalum-Big Eddy and McNary-Ross lines. As is typical, the contractor will recycle these materials and use the anticipated financial proceeds to reduce the overall bid price to BPA. This, when combined with appropriate mitigation procedures, would provide for the responsible handling and use of salvaged materials.

10040-004

We appreciate the opportunity to comment on the DEIS. If you have any questions about our comments, I encourage you to contact Teresa Kubo of my staff at 503-326-2859 or at kubo.teresa@epa.gov.

Sincerely,



Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

10040-004 Thank you for your comments.

BEKD10041



Affiliated Tribes of Northwest Indians

1827 NE 44th Ave., Suite 130 * Portland, OR 97213-1443

Phone: 503/249-5770 * Fax: 503/249-5773

Email: atni@atnitribes.org * Web page: www.atnitribes.org

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Energy Consultant

Direlle R. Calica

January 24, 2011

Ms. Stacy Mason
Project Environmental Lead
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

Dear Ms. Mason:

RE: Comments on the Big Eddy-Knight Transmission Project Draft Environmental Impact Statement

The Affiliated Tribes of Northwest Indians (ATNI) submits these comments regarding the Bonneville Power Administration's Big Eddy Knight Transmission Project Draft Environmental Impact Statement (DEIS) (DOE/EIS-0421). ATNI participated with other interested tribes in developing these comments. While we support the overall efforts by BPA Transmission Services to extend the power grid in an effort to alleviate transmission constraints within BPA's system, we ask that tribal sovereign and energy resource interests be given thorough consideration throughout the process of selecting the preferred Action, as well as the planning, construction, and operation phases of the proposed project.

We would like to stress that several Northwest tribes are favorably located in areas diverse with natural, cultural, fish and wildlife, renewable energy, some transmission resources, and several generate a large share of their tribal revenues from participation in the energy industry. Additionally, because several Northwest tribes have long-term commitments as co-managers of our shared resources, they ask that the BPA consider these comments as support to the efforts, interests, and endeavors of our affected and interested tribes in Northwest regional transmission planning and expansion decisions.

In particular, the Confederated Tribes and Bands of the Yakama Nation and the Confederated Tribes of Warm Springs are identified in the DEIS and both play key roles in FCRPS mitigation programs and are also active in national and regional tribal energy initiatives. Accordingly, both tribes, along with the several others involved in the FCRPS mitigation programs have an affirmative interest to assure tribal rights, interests, resources and assets are fully considered in this process of

10041-001

10041-002

- 10041-001 Thank you for your comments. BPA is working with the four Tribes with interests in the area; the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Warm Springs Reservation, the Nez Perce Tribe of Idaho, and the Confederated Tribes of the Umatilla Indian Reservation. The chairman/chairwoman, as well as resource staffs of various offices within the Tribes, have received all notifications about the project. BPA has met with and is working directly with the cultural resource groups of each tribe; the Yakama and Warm Springs tribes have provided staff for the cultural resource survey work and all four Tribes have provided BPA with Traditional Culture Properties reports. BPA met with the Yakama Tribal Council on November 11, 2009 and is beginning to conduct government-to-government consultation with the Yakama Tribe as requested by the Tribe on January 28, 2011.
- 10041-002 Comment noted. Please see response to comment # 10041-001.

determining the preferred Action Alternative for the Big Eddy Knight Transmission project. We are in support of their comments and concerns.

In the process of the agency's consideration of the Proposed Action Alternatives we ask for your consideration and inclusion of the following items:

1. **Consultation:** "Chapter 5: Consultation, Review and Permit Requirements" lists applicable laws and areas of responsibility that will guide the consultation, review and permit process related to this project. However, consultation related to the interested and affected tribes is not specifically identified in this Chapter. Although, tribal consultation is cited in the "Cultural Resources" section of Chapter 5, affected tribes would likely take interest in other areas of the project. See discussion outlined below. We suggest that a "Tribal Consultation" section be added to Chapter 5 and be given greater emphasis through this process and implementation. The DEIS itself does not reference any treaties with tribes and rights under those treaties.
 - a. Recommendation: Add a "Tribal Consultation" section to Chapter 5 which should include and reference at minimum to the BPA Tribal Policy and the Department of Energy's American Indian Policy (DOE Order No. 120.2)(April 8, 1992). It would also be helpful to include specific language of the treaties bearing on the fishing, hunting, gathering and grazing rights of the tribe by placement of the line on federal public lands as well as tribal trust lands. Agencies often conflate their consultation obligation with tribes into cultural resource laws section because those laws specifically mandate consultation. This ignores the general trust obligation of agencies to consult with tribes regarding the protection of the resources the tribe have a right to under treaty.
2. **Government-to-Government Consultation and Coordination:** Currently, Chapter 5, Section on "Cultural Resources," states "[t]he Tribes have not requested formal government-to-government consultation meetings to date." However, the absence of such request to consult does not equate to a lack of interest from the affected and interested tribes regarding the impacts to cultural resources, fish, wildlife, water resources and wetlands, vegetation, health, socioeconomic, noise, visual, etc. Nor does the absence of such request absolve BPA from ensuring appropriate and meaningful coordination at the Technical Staff level between the agency and their respective tribal counterparts.
 - a. Note: ATNI Energy Program Cooperation with ColumbiaGrid: ATNI has been an active participant in Regional and Sub-regional Transmission Planning and Expansion processes, specifically those associated with ColumbiaGrid of which BPA is a member. However, ATNI is a non-profit intertribal organization tasked with the affirmative duty to support our member tribes on policy issues of interests and have direct impacts to their valued resources and assets. While ATNI has participated in the regional and sub-regional transmission planning and expansion process this does not absolve federal responsibility to provide active outreach, coordination, and if requested consultation with the affected and interested tribes.
 - b. Recommendation: The DEIS should state that BPA will actively promote government-to-government consultation and coordination efforts with affected tribes.
3. **Issue Appropriate for Tribal Interface:** Other components of the DEIS also merit consultation and coordination with particularly with regard to the tribes' treaty and trust interests, natural resources, fish and wildlife interests, impacts to habitat, water resources and wetlands, vegetation, aesthetic impacts, etc. We agree that cultural resources is an appropriate section to address tribal interests but tribes have diverse interests that cannot be addressed by one arm, department, or point of contact with the respective tribes.
 - a. Recommendation: We suggest that comprehensive and meaningful coordination with the tribes be included to begin to address this point.

- 10041-003 In response to the comments of the Affiliated Tribes of Northwest Indians (ATNI), a new section called Section 5.15 Tribal Consultation has been added to Chapter 5 of the EIS.
- 10041-004 Please see revisions to Chapter 5 of the EIS described in the response to comment #10041-003.
- 10041-005 Please see revisions to Chapter 5 of the EIS described in the response to comment #10041-003.

- 10041-006
4. **Proposed Action Alternatives:** We ask that BPA consider the most appropriate Action Alternative through the federal-tribal lens of federal treaty, trust responsibility and shared stewardship to the existing resources. In our view the ideal Action would be the one with no or the least amount of impact and the highest level of stewardship and mitigation toward protection of these valuable shared resources. However, we appreciate that this is an awesome task and requires a careful balancing of the diverse interests involved in the determination of actions for this project.
- a. Recommendation: Accordingly, we suggest that the agency reach out to the affected and interested tribes in a comprehensive manner.
- 10041-007
5. **Environmental Impacts and Mitigation Measures:** Each of the three Proposed Action Alternatives will have a definite impact to the key resources of the affected and interested tribes. Despite varying impacts with each proposed action alternative and route, there will be significant impacts to environmental resources of the tribes. Concerning specific impacts, we will defer to the affected and interested tribes on those affected resources, data and relevant information. In short, we suggest that meaningful and comprehensive intergovernmental coordination and consultation between BPA and the tribes a plan and process be identified. The following highlights our general concerns and recommendations:
- a. **Vegetation:** With the construction, operation and maintenance of the Big Eddy line and Knight Substation, there will be environmental consequences particularly to native vegetation. As we have seen in and along other major transmission routes in the Northwest, there are impacts to native vegetation. Many of these native plants are important to the tribes, some of which are ceremonial foods. Through meaningful coordination with the appropriate tribal entities impacts and mitigation measures can be identified to address tribal concerns.
- 10041-008
- b. **Fish & Wildlife:** Similarly, we recommend that the EIS observe the impacts to fish and wildlife and their respective habitats. While we appreciate that the Big Eddy Knight project will alleviate congestion and constraints, and hopefully will provide some much needed stability in the operation of the FCRPS, we ask that BPA take a hard and careful look at the proposed alternatives and actively coordinate with the affected and interested tribes on appropriate mitigation measures.
- 10041-009
- c. **Water Resources and Wetlands:** Likewise, we ask that BPA actively coordinate with the affected and interested tribes on the impacts and appropriate mitigation measures to address specific water resources and wetland issues. An active dialogue between the agency and the tribal entities will address our concerns.
- 10041-010
- d. **Cultural Resources:** Finally, we would like to underscore the need to assure adequate consideration, protection, and mitigation of impacts to cultural resources, historic and sacred sites. The Proposed Action Alternatives for this project are located in and around areas of critical importance to the tribes for their historic and cultural value. For the impacts to cultural resources we strongly urge that the EIS protect the interests of the tribes affected. In particular, tribes from the FCRPS Cultural Resources cooperating groups, should be meaningfully consulted, coordinated with and included in this process of determining the best action for this project.
- 10041-011
6. **General Recommendations for DEIS:**
- a. **Federal and Tribal Authorizing Actions:** Recommendation to include a specific section that highlights the authorizing actions that may be implemented by BPA as lead agency and cooperating agencies. Such a provision should be upfront and inserted within Chapter 1.
- 10041-012
- b. **Socio-Economic Concerns:** Recommendation to include within Chapter 3, Section 9 a discussion to address any tribal concerns related to this issue.

- 10041-006 Please see response to comment #10041-005.
- 10041-007 The four potentially affected Tribes have provided traditional cultural property reports to BPA which, among other things, help identify areas of native vegetation that are important to the respective Tribe. BPA has been working with tribal staff to determine ways to avoid or mitigate potential impacts to those plants.
- 10041-008 Sections 3.6 and 3.7 of the EIS identify potential impacts to fish and wildlife species and their habitats, as well as the mitigation measures to lessen or avoid impacts. BPA will continue to coordinate with the Tribes regarding potential impacts and appropriate mitigation measures.
- 10041-009 Section 3.5 of the EIS identifies potential impacts to water resource and wetlands, as well as the mitigation measures to lessen or avoid impacts. BPA will continue to coordinate with the Tribes regarding potential impacts and appropriate mitigation measures.
- 10041-010 Section 3.8 of the EIS identifies potential impacts to cultural resources, as well as the mitigation measures to lessen or avoid impacts. BPA will continue to coordinate with the Tribes regarding potential impacts and appropriate mitigation measures.
- 10041-011 Comment noted. Specific actions that would be implemented by BPA if it decides to proceed with the proposed project are described in Section 1.5.1 of the EIS, which also describes activities of cooperating agencies for the EIS. Section 1.5.2 of the EIS describes how other federal agencies may have authorizing or approval responsibilities related to the proposed project, as well as how the EIS may be used by certain state, regional, and local agencies to fulfill their environmental review requirements related to the proposed project. The specific permitting, review, and other authorizing activities of the various involved agencies are further described in Chapter 5 of the EIS. In addition, authorizations specific to the Columbia River Gorge National Scenic Area are discussed in more detail in Chapter 7 of the EIS, and authorizations specific to Washington DNR are provided in Appendix I of the EIS.
- 10041-012 Discussions with various Tribes have not included socioeconomic concerns of the Tribes in regard to the proposed project. If socioeconomic issues are identified, they will be described in the EIS.

10041-013

c. **Environmental Justice and Indian Assets:** Recommendation to include within Chapter 3, Section 3.9.2, a thorough discussion on environmental justice and tribal assets. Discussion should include impact assessment methodology and environmental consequences.

10041-014

d. **Fiber Optics:** Recommendation to address fiber optic concerns as they relate to tribal communities, in particular the Yakama Nation under Section 3.15.

10041-015

e. **Tribal Agreements:** On page 5-8, the DEIS states "BPA's 1996 government to government agreement with 13 federally recognized Native American Tribes of the Columbia River basin provides guidance for the Section 106 consultation process with the Tribes." We can find no 1996 tribal agreement on consultation or is this a reference to the BPA Tribal Policy.

i. **Recommendation:** Please clarify and site the agreements mentioned on pages 5-8 and include a separate section on BPA's Tribal Policy.

In closing, we appreciate the opportunity to provide comments on the Big Eddy Knight Transmission Project DEIS. We look forward to continuing our ongoing coordination and work with BPA Transmission Services, and our colleagues at ColumbiaGrid. We understand the need for this project in alleviating constraints on the region's transmission system. However, we ask for your careful and thorough consideration of the impacts and interests of our member tribes in determining the Big Eddy Knight Transmission Project's pathway forward. Simply, tribes need to be included given the concerns outlined above. Should you have any questions please do not hesitate to contact either myself or....

Respectfully,

Andrea Alexander
ATNI Energy Director

Direlle R. Calica
ATNI Energy Program Consultant

Cc: Brian Cladoosby, ATNI President
ATNI Board of Directors
Cleora Scott, ATNI Executive Director
Richard George (Yakama), ATNI Energy & Telecommunications Committee Co-Chair
Susie Allen (Colville), ATNI Energy & Telecommunications Committee Co-Chair
Charles Calica, Confederated Tribes of Warm Springs Secretary-Treasurer/CEO
Carroll Palmer, Confederated Tribes & Bands of the Yakama Nation, Administrator
Paul Lumley, Columbia River Intertribal Fish Commission Executive Director
Nathan L. Dexter, BPA Tribal Affairs Manager

- 10041-013 Section 3.9.1 was revised to add more detail relating to minority populations within the socioeconomic study area, and to include a distinction between census tracts and block groups. Section 3.9.2 includes a discussion of environmental consequences to Environmental Justice populations. The section was revised to clarify impact assessment methodology. Because no disproportionate impact to low-income or minority populations was measured, additional discussion relating to those populations was not added to the analysis.
- 10041-014 Section 3.15 of the EIS has been updated to address potential issues of the fiber optic cable to tribal communities.
- 10041-015 This should refer to the Tribal Policy. The EIS text has been updated. Please also see response to comment # 10041-003.

BEKD10042



STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL
PO Box 43172 • Olympia, Washington 98504-3172

January 27, 2011

Ms. Stacy Mason
Environmental Coordinator – Big Eddy Knight
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

Dear Ms. Mason:

Subject: State Agency Comments – Big Eddy Knight Transmission Line Project Draft Environmental Impact Statement

10042-001

Thank you for the opportunity to review the Big Eddy Knight Draft Environmental Impact Statement (DEIS). No inconsistencies between state agency comments were discovered. This determination was made after a thorough review and comparison of state agency comments submitted to EFSEC. Copies of state agency comments are enclosed and are being provided to you pursuant to the BPA/EFSEC Work Plan Agreement Section III - EFSEC Work Plan Responsibilities, Part G.

EFSEC Primary Concerns:

10042-002

We are pleased that BPA has addressed most of EFSEC's concerns previously identified within the Big Eddy Knight Preliminary DEIS. However, EFSEC maintains that the DEIS should discuss public safety measures, with the inclusion of an emergency response plan, in the event of a natural disaster or other major event(s) to or affecting the project. Public health and safety measures are fundamental to compliance with state substantive standards under WAC 463-60-352.

10042-003

The following state agencies provided comments to EFSEC:

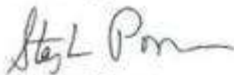
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources

- 10042-001 Thank you for your comments.
- 10042-002 As a federal agency that owns and operates more than 75 percent of the high-voltage transmission grid in the Pacific Northwest, BPA is concerned about public safety. About 12 million people live within BPA's service area of about 300,000 square miles. As required by the Department of Energy (DOE) Order 5500.11, Power Marketing Administration Emergency Management Program (now the updated DOE M 151.1-1), BPA established an Emergency Response Program in 1994. The Emergency Response Program is a multi-hazard program that maximizes BPA's capacity to prepare for, respond to and recover from all types of power and transmission line emergencies in addition to general business disruptions. The Emergency Response Program establishes the following emergency management priorities:
1. Protection of life;
 2. Protection of property and the environment;
 3. Notification of the public, customers, the news media, governmental agencies and other constituencies about the emergency and recovery;
 4. Restoration of electric power;
 5. Restoration of critical business line functions; and
 6. Restoration of other normal business functions.
- BPA's Emergency Response Program is a framework, rather than a detailed step-by-step approach, which is designed to offer flexibility so that it can be used for all events, recognizing that it is impossible to create a list of detailed procedures to meet the needs of every single disruptive event. This framework consists of the following: emergency response; crisis and incident management; continuity of operations; and infrastructure restoration. If a natural disaster or other major disruptive event occurs, BPA would implement this Emergency Response Program.
- 10042-003 Comment noted.

Ms. Stacy Mason
January 27, 2011
Page 2 of 2

Thank you again for the opportunity to review the DEIS. Please contact me at (360) 664-1903 or Stephen.Posner@utc.wa.gov if you have any questions concerning this letter.

Sincerely,



Stephen Posner
EFSEC Compliance Manager

Enclosures

BEKD10043

Bumpus, Sonia (UTC)

From: Mathey, Jared W. (ECY)
Sent: Thursday, December 16, 2010 8:17 AM
To: Posner, Stephen (UTC)
Subject: FW: Air Quality Comments on Big Eddy Knight Draft EIS

Big Eddy Knight
Draft EIS #1

Forwarded to your new e-mail address.

RECEIVED

JAN 16 2011

ENERGY FACILITY SITE
EVALUATION COUNCIL

Jared Mathey
Commercial Industrial Compliance Inspector
Department of Ecology
Air Quality Program
(509) 454-7845

From: Mathey, Jared W. (ECY)
Sent: Thursday, December 16, 2010 8:16 AM
To: 'stephen.posner@commerce.wa.gov'
Cc: Billings, Susan M. (ECY); 'slprickett@bpa.gov'; 'slmason@bpa.gov'; Clear, Gwen (ECY); Knapp, Anne (ORA)
Subject: Air Quality Comments on Big Eddy Knight Draft EIS

Stephen,

As outlined in Contract No. S10-550-001 (10-11) Task Order 4: BPA Big Eddy - Knight Transmission Project - 2.0. A. 4, below are Department of Ecology's Air Quality Program's comments on the Draft Environmental Impact Statement (DEIS) for the Big Eddy Knight Transmission Line Project.

10043-001

After reviewing the Draft EIS, I have no comments. All comments sent by me on June 16, 2010, for the Preliminary Draft EIS were addressed in the Draft EIS.

Thanks, Jared Mathey
Commercial Industrial Compliance Inspector
Department of Ecology
Air Quality Program
(509) 454-7845

10043-001 Thank you for your review and comment.

BEKD10044

RECEIVED

JAN 21 2011



State of Washington

ENERGY FACILITY SITE

Department of Fish and Wildlife EVALUATION COUNCIL

Habitat Program - Major Projects Division - Wind and Water Energy Section

Mailing Address: 2620 North Commercial Avenue (509) 543-3319
Main Office Location: 2620 North Commercial Avenue - Pasco, WA 99301

Big Eddy Knight
Draft EIS #2

MWR-03-11

January 21, 2011

Ms. Stacy Mason-KEC-4
Project Environmental Lead
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

SUBJECT: Draft EIS, Big-Eddy Knight Transmission Project

Dear Ms. Mason,

The Washington Department of Fish and Wildlife (WDFW) has reviewed the Draft EIS and offers the following comments for your consideration. Other comments may be offered as this project moves forward.

10044-001

WDFW supports BPA's preferred action alternatives for the transmission line (East), the substation (site 1) and for fiber optics (Wautoma). BPA has conducted a comprehensive effort to document the existing and potential natural resources in the project area and made reasonable assumptions related to actual and probable impacts. All alternatives will result in both temporary and permanent impacts to natural resources and in many cases the level of impacts is nearly identical. The preferred alternatives take into account the natural resources and allow for the efficient construction and reliable transmission of electrical power.

10044-002

We appreciate the effort that BPA has taken to incorporate and make use of the WDFW 2009 Wind Power Guidelines. While not a wind power project, the use of these Guidelines in Chapter 6, Section 6.3, provides a consistent platform to assess potential impacts to native species and habitats, as well as to address avoidance and minimization.

Thank you for the opportunity to provide these comments. We look forward to working with BPA on this project.

Sincerely,

Michael Ritter

Michael Ritter
Wind Mitigation Biologist

- 10044-001 Thank you for your review of the EIS and comments.
- 10044-002 Thank you for working with BPA to help identify issues to be addressed.

BEKD10045



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

Big Eddy Knight
Draft EIS #3

January 25, 2011

RECEIVED

JAN 25 2011

ENERGY FACILITY SITE
EVALUATION COUNCIL

Stacy Mason – KEC-4
Project Environmental Lead
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208

Re: Big Eddy-Knight Transmission Project

Dear Ms. Mason:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Big Eddy-Knight Transmission Project. We have reviewed the documents and have the following comments.

Shorelands/Environmental Assistance

10045-001

S.2.1: How will the transmission line cross the Columbia? Whether above or below ground, the project would have to comply with/be consistent with the local Klickitat County Shoreline Master Plan (KCSMP) requirements. The KCSMP requires that a 50-foot natural vegetation zone be maintained around all shorelines, and ideally all structures should be set back further than that; however the shoreline designation dictates the minimum distance for structures in any one shoreline location (and it can be greater than the 50-foot vegetation setback requirement). In addition, the project may require a US Army Corps of Engineers 404 permit for wetland and stream crossings.

10045-002

3.3.1 Special Status Species: Because of the time of year of the vegetation surveys, there is an expectation cited in the document that some of the plants that were documented in the Columbia Hills State Park area were missed. Will additional surveys be performed once a preferred alternative has been chosen?

- 10045-001 The transmission line would span overhead across the Columbia River from towers on either side of the river. For the West Alternative, the closest tower would be over 250 feet from the edge of the Columbia River. For the Middle and East alternatives, the towers would be over 500 feet from the Columbia River's edge.
- The project would be generally consistent with the Klickitat County Shoreline Master Plan and BPA would coordinate with the U.S. Army Corps of Engineers about the project and its potential impacts on waters of the United States. See Chapter 5 of the EIS for more information about consistency with the Klickitat County Shoreline Master Plan and coordination with the U.S. Army Corps of Engineers.
- 10045-002 Although some special status species were not found during project surveys, the EIS assumes they are present and based impacts on the mapped occurrences of those species. No further field surveys are planned.

Ms. Mason
January 25, 2011
Page 2

- 10045-003 | 3.3.3 Mitigation measures for vegetation disturbance: The expected duration of monitoring and control of noxious weeds or invasive non-native species, after construction is done, should be discussed.
- 10045-004 | 3.5.1: Swale Creek has a wide floodplain and there is a high likelihood that there are wetlands within that floodplain.
- 10045-005 | 3.5.2 Environmental Consequences: West Alternative, Water Resources Page 3-85: There is a statement made that because there are no trees at the Swale Creek crossing at line mile W11, that no riparian vegetation would be impacted. The presence of shrubs would be considered by this reviewer to constitute riparian vegetation: Were any shrubs in this location going to be disturbed that are shading the stream?
- 10045-006 | 3.5.2 Wetlands Table 3-19: There is a note at the bottom of this table which appears to state that wetland delineations have not yet been completed. A reference should be added to this note which states where in the document the methodology used to determine the location and size of the wetlands present within this table can be found. The information on methodology should probably also be placed in the text at the beginning of the wetlands section on page 3-82. If only National Wetland Inventory maps were used to predict impacts, then the projected impacts might not be accurate.
- 10045-007 | 3.5.2 Page 3-89: There is a statement that six wetlands would potentially be impacted by more than 0.10 acre, and that impacts over 0.10 acre was a threshold by which mitigation for the impacts is determined. This statement seems to imply that the cumulative wetland impacts from this project are not additive when determining whether mitigation will be required or not, and that only impacts of greater than 0.10 in any one wetland will be mitigated.
- Where does this threshold come from? When Ecology is assessing the impacts of a project, the cumulative impacts of the project to wetlands is reviewed and the threshold for mitigation is based on all the sum of the total wetland impacts. Once the impact threshold exceeds 0.50 acres of direct impact, then an individual permit from the Corps of Engineers under the Clean Water Act would likely be triggered, and if Ecology were writing the 401 response, an individual 401 permit would likely be required once that threshold was exceeded.

- 10045-003 Please see response to comment #10040-002.
- 10045-004 As described in Section 3.5 of the EIS and illustrated on maps in Appendix B of the EIS, there are wetlands associated with Swale Creek at the creek crossings of both the Middle and East alternatives.
- 10045-005 Shrubs or other low-growing riparian vegetation would not be disturbed at the creek crossing because the towers are far enough away from the riparian zone that their footprint would not impact it. Trees were specifically mentioned because there is a potential that they could require removal for line clearance even if the towers were far from the creek edges. Section 3.5.2 of the EIS has been updated to clarify this point.
- 10045-006 Wetlands along the project were identified through field reconnaissance in April 2010 using the USFWS wetland classification system (Cowardin et al. 1979). If the project proceeds, wetland delineations would be conducted in locations where facilities cannot avoid impacts. Text has been added to Section 3.5.1 of the EIS to clarify this.
- 10045-007 BPA is evaluating potential wetland impacts according to the 2007 Nation Wide Permit (Federal Register 72 FR 11092) definition of "Single and complete project" below. According to the definition, impacts are only additive if the linear project impacts a single waterbody multiple times at the same location. Discussion of wetland impacts in the EIS under Section 3.5.2 consists of impacts to individual waterbodies that have the potential to amount to 0.10 acre or larger and would, therefore, require compensatory mitigation under 2007 Nation Wide Permit 12.
- U.S. Army Corps of Engineers Nation Wide Permit Definitions: *Federal Register/Vol. 72, No. 47, March 12, 2007*:
- Single and complete project: The term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete project must have independent utility (see definition). For linear projects, a "single and complete project" is all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

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10045-008

3.5.3: The formulation of a wetland mitigation plan with appropriate compensation for temporal wetland losses should be included in the list of mitigation measures (if permanent impacts for any one alternative exceed ½ acre).

10045-009

6.4.2 Water Quality: Wetlands are one of the beneficial uses that are protected under RCW 90.48 and WAC 173-201A. If there is no Clean Water Act nexus for requiring wetland mitigation, then Ecology authority to require mitigation for wetland losses also rests in this section.

Wetland reports prepared for this project, once an alignment has been chosen, should include a delineation and rating of wetlands impacted. The environmental review documents should include a narrative about proposed wetland impacts and wetland mitigation measures.

10045-010

Substations should be located outside of critical areas, with adequate buffers from the structure to any wetland or stream feature.

If you have any questions or would like to respond to these Shorelands/Environmental Assistance comments, please contact Catherine Reed at (509) 575-2616.

Sincerely,



Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012

1326

- 10045-008 Section 3.5.3 of the EIS has been revised in response to this comment.
- 10045-009 Please see the response to comment #10045-008.
- 10045-010 There are no wetlands or streams at or in the vicinity of the Knight Substation sites.



BEKD10046

Caring for
your natural resources
... now and forever

January 25, 2011

Stacy Mason
Environmental Protection Specialist
Bonneville Power Administration
905 NE 11th Avenue
Portland, Oregon 97208

RE: DNR Comments on the Big Eddy – Knight Draft EIS

Dear Ms. Mason:

Thank you for the opportunity to review and comment on the Big Eddy – Knight Draft Environmental Impact Statement (DEIS). Congratulations on completing this critical phase of BPA's EIS process. Thank you for considering and addressing many of DNR's concerns on the Preliminary DEIS to the organization of the document and the analysis of impacts and potential mitigation measures. Significant additions/changes have been made by BPA to organize the document, analyze issues and propose mitigation for:

- Impacts to the development of wind energy.
- Long-term control of noxious weeds/invasive species on DNR-managed trust lands.
- Long-term maintenance of roads on all lands.
- Coordination with DNR on the design of roads on state lands.
- Adding a Transportation section to Chapter 3 Affected Environment, Environmental Impacts and Mitigation Measures.
- Recognizing the potential for long term impacts in the cumulative impacts methodology and analysis.

Our primary concerns at this stage of review are about the impacts to lands and other resources, including State lands managed by DNR. We are particularly concerned about:

- Land use restrictions including the severance of DNR-managed trust lands.
- Impacts to sensitive lands (Columbia Hills Natural Area Preserve) and special-status species. The West Alternative is currently unacceptable to DNR.
- Lack of clearly defined roads standards that cover all right-of-way easement and access roads for the entire project.
- Fire prevention plans for all lands.
- Long term control of noxious weeds for the entire project on all lands affected by the transmission line.
- Establishing a reasonable range of alternatives.

Due to the extensive repetition of concerns in past DNR comments, we have attempted to organize our comments around issues we've identified throughout the Draft EIS as critical to the environmental analysis and possible mitigation of environmental impacts.

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- 10046-001 Thank you for your comments.
- 10046-002 Specific issues raised are addressed in the following responses to more detailed comments on these issues.

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10046-003

These issues predominantly relate to the substantive state standards embedded in the regulatory, proprietary and other natural resource stewardship duties of DNR. A compilation of the Department's standards has been prepared and provided to BPA under a separate letter dated January 19, 2010. The department has many responsibilities including the management of certain public lands as defined in RCW 79.02.01 including Federally Granted State Lands, State Forest Lands, Natural Area Preserves, Natural Resource Conservation Areas and State Owned Aquatic Lands. DNR also regulates timber harvest activities; provides wild land fire protection on non-federal lands; collects, analyzes, and distributes scientific data about state plants; and provides recreational opportunities. The Washington State Geologist is part of DNR. This position is responsible for maintaining and providing expert information on geologic hazards throughout the state.

10046-004

State lands managed by DNR are impacted by all of the currently identified alternative routes proposed. DNR manages approximately 2514 acres of trust uplands, a subset of which could be directly impacted by the west and east alternatives and the middle alternative when combined with the Knight Sub-station Site 1 or Site 2. Approximately 828 of these acres are currently managed under the Columbia Hills Natural Area Preserve (NAP) that is impacted by the west alternative. The state lands that are not dedicated to a Natural Area Preserve are managed for revenue from agriculture and wind power. The substation agriculture parcel is 570 acres; east alternative wind parcel is 482 acres; and the west alternative agriculture parcel is 634 acres.

DNR upland managed acres by proposed R/W easement widths	PROJECT_NAME
ALTERNATIVE OPTION	BIG EDDY-KNIGHT
EASTSIDE to junction with Middle and West	9
SITE 2 (approx. parcel sale size)	30
SITE 2 (corridor to access substation site 2)	14.5
WESTSIDE OPTION 2 (250' corridor) to junction with Middle	92

10046-005

Consideration of State and local issues and standards is consistent with National Environmental Policy Act (NEPA) regulations in 40 CFR 1501.1 Purpose (b) in part to coordinate with State and local agencies, 40 CFR 1502.16 Environmental consequences (c) in part to include discussions of possible conflicts with State and local land use plans, policies and controls for the area concerned, and 40 CFR 1500.2 Policy (e) and (f) to avoid or minimize adverse effects of proposals upon the quality of the human environment. This is consistent with the requirement in the 2009 Work Plan Agreement between BPA and Washington Energy Facility Site Evaluation Council (WA EFSEC) for the Big Eddy-Knight Transmission Line Project. "...to be consistent or compatible with state and local substantive standards, environmental or otherwise, to the extent practicable."

10046-006

DNR is the likely State Environmental Policy Act (SEPA) lead agency for the Big Eddy-Knight project and as such DNR is concerned with consistency with other state and local agencies standards, policies and plans. DNR is cooperating with BPA to help ensure BPA prepares a

- 10046-003 DNR's substantive standards are addressed in Chapter 6 of the EIS.
- 10046-004 Appendix I of the EIS describes potential impacts by action alternative on the DNR parcels that could be crossed. For the transmission line, a 150-foot right-of-way would be required. Where existing right-of-way could be used (such as one of the West Alternative options across the Natural Area Preserve and an agricultural parcel) only 50 feet of additional right-of-way could be required. No alternatives would require a new 250-foot wide right-of-way. The West Alternative option that would build the proposed line next to the existing line would require a 150-foot wide right-of-way; together with the existing 100-foot right-of-way, a total 250-foot wide BPA right-of-way would be along this line section.
- 10046-005 Project consistency with state, area-wide, and local plans and programs is addressed in Chapter 5 of the EIS. In addition, project consistency with state substantive standards, including DNR standards, is addressed in Chapter 6 of the EIS.
- 10046-006 BPA has been meeting regularly with DNR about this project to address DNR's SEPA obligations and to help facilitate DNR's adoption of BPA's NEPA EIS.

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10046-006
continued

NEPA Environmental Impact Statement (EIS) that is adoptable under SEPA for all State and local agencies. The EIS must analyze the significant impacts of the proposal to the SEPA defined natural and built environment (WAC 197-11-444) even if there are no substantive standards, policies, or plans addressing them. DNR comments are also designed to assist BPA in meeting the basic tenets of NEPA, to protect the human environment.

SEPA requires sufficient information that discloses the significant adverse environmental impacts of the proposal and alternatives, discusses the effectiveness of possible mitigation measures that would significantly mitigate the impacts, and provides for making a reasoned choice between alternatives.

Issues and concerns with the Big Eddy-Knight Draft EIS

10046-007

Land Use and Restrictions Including Severance of DNR-managed Trust Lands, and Development of Wind Energy.

DNR is the manager of 3 million acres of state trust lands. We are entrusted to generate revenue into perpetuity for specific trust beneficiaries. Millions of dollars in revenue generated each year provides necessary funds for construction of public schools, universities, prisons, and other state institutions, and county services such as libraries, firefighting, and hospitals. Revenue producing activities on state trust lands include sustainable management and harvest of timber and forest products, leasing of agricultural lands (for orchards, vineyards, row crops, dry land crops, and grazing), mineral leases, communication and wind power sites.

DNR is concerned that encumbered lands and lands adjacent to encumbered lands (outside the right-of-way) can have negative impacts on the use and productivity of those lands. Any alternatives that include DNR managed uplands create an adverse impact. DNR lands are managed for many purposes and uses including the protection of state and federal threatened and endangered species, agriculture and grazing which directly supports public services by providing revenue for the school construction fund, and environmental protection. The construction, maintenance and operation of a transmission line conflicts with these purposes and uses.

10046-008

Trust Land Management Impacts including Severance Impacts by Transmission Lines

The siting location and impacts of new overhead transmission lines can create significant severance of productive trust lands in regards to access and trust management. Severance by power lines can be far reaching. Thank you for including the additional discussion in 3.9 Socioeconomics on the impacts to state trust lands and general property impacts and compensation.

10046-009

When considering alternative transmission line routes, the overall siting across trust lands should avoid highly productive or revenue generating lands as opposed to lands with lower economic or environmental significance.

10046-010

- The Final EIS should explain how BPA compensates land managers for the severed area between two critical lines (1,200 feet) and if future critical lines could someday parallel

- 10046-007 DNR's trust responsibilities are outlined in Section 6.2 of the EIS and potential impacts to the management of DNR parcels from the project are described in Section 3.1 and Appendix I of the EIS.
- 10046-008 Comment noted.
- 10046-009 BPA considers many factors during transmission line siting (see Section 2.2 of the EIS), including land use. The proposed project has three routing alternatives, two of which cross portions of DNR-managed land. As described in Appendix I of the EIS, the alternatives cross DNR land managed for a Natural Area Preserve, agriculture, and wind development. A 0.5 mile portion of the East Alternative would cross a DNR parcel with wind turbines (the highest revenue generating land). This stretch of line runs through the existing turbine strings, but would not affect the operation of the wind facility. Additional turbine placement in this particular area is unlikely because of the terrain and because existing turbines were placed in the prime wind locations.
- 10046-010 The Big Eddy-Knight Project does not include routing options that require the line to be placed 1,200 feet from an existing line. Several options that were considered and eliminated from detailed consideration would have required such line separation (see Section 2.6.4). If in the future an additional line were proposed in the project area, system studies would determine if it would be required to be separated from existing lines in the vicinity. As described in Section 3.9, the appraisal process takes all factors affecting property value into consideration, including where the right-of-way would cross over a property in relationship to the property's size, shape and location of existing improvements. Also see response to comment #10046-013.

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the new proposed corridor chosen for the Big Eddy Knight.

- 10046-011 • There is a list of events listed on page 2-3 that could cause outages and yet none of the alternatives are analyzed for risk of potential outages in the rest of the document.
 - Historical information on tower failures should be considered. The Final EIS should discuss the relative merits of the alternatives related to tower failures and what causes tower failures, e.g., flight paths, fire history, lightning strikes. The need for line separation is leading to greater encumbrances on those lands that meet the siting criteria best. It should be clear what the risk of tower failure is, and that the alternatives proposed actually reduce the risks for lines that are too close together.
- 10046-012 • Chapter 2 Proposed Action and Alternatives section 2.3.1 Easements and Land pg. 2-4 should include discussion of the road that is required to access the substation, the need to acquire right-of-way to access site 1, the desire for BPA to acquire the road in fee, and landowner use of the road.

To address the long-term issues with the siting of this transmission line, the Final EIS should analyze the following issues and discuss the following possible mitigation:

- 10046-013 • Mitigation for degradation of value or use of the land adjacent to the right-of way
- 10046-014 • Analyze locations for siting the corridor that ensure the greatest productive use of trust lands within the corridor.
- 10046-015 • Analyze the full use of state trust lands; DNR is legally required to obtain full compensation for any use of state trust lands.
- 10046-016 • The siting analysis-appraisal of the proposed rights-of-way should determine the collective damages associated with the economic and environmental impacts of severance to adjacent existing or future agricultural lands, communication and wind power sites.
- 10046-017 • BPA has acknowledged on page 3-132 General Property Impacts and Compensation for land use impacts outside the easement "...in cases of severance." BPA should also acknowledge that some restrictions to land use outside the easement will occur even where severance does not, and consider mitigation such as compensation to landowners accordingly.
- 10046-018 • Evaluation of foreclosing options for converting lands to other uses likely to occur such as agriculture and wind power.
- 10046-019 • Analyze and more fully define the extent of restrictions outside the easement area particularly in areas where the corridor will disallow, limit or increase the cost of agriculture, wind power production, solar energy development, communication sites, residential development, commercial development and recreational use.
- 10046-020 • Analyze and more fully define potential trust management activities that are compatible within the right-of-way.
- 10046-021 • The mitigation measure listed on page 3-22 "Restore compacted cropland soils to pre-construction conditions" should be supported by citations to published soils science or a professional soils scientist. It is unclear to DNR whether this is possible.
- 10046-022 • The description of the proposal and subsequent discussions in the EIS should address the potential for third party use of the proposed fiber optic cable which is beyond the use of

- 10046-011 Section 2.2 of the EIS that is referenced in this comment discusses the need in some cases for transmission line separation. The analysis for line separation was considered during early project line siting and the line alternatives proposed and analyzed in the EIS do not require separation from existing lines. Therefore, there is no need to address potential outage risks of parallel lines. Please also see response to comment #10046-010.
- 10046-012 Section 2.3.1 of the EIS was updated to include the need for the substation access road to be owned in fee. Section 2.4.5 of the EIS was updated to include information about access roads to the substation sites. Full use and joint use of the substation access roads is addressed in Appendix I of the EIS.
- 10046-013 When BPA proposes to acquire a right-of-way and/or related access easements on DNR trust lands, the appraisal process would consider the highest and best use of the larger parcel, and determine the easement's impact using a before and after methodology as described in the Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA). The appraisal process would establish the value of these impacts for the land rights to be acquired in accordance with the BPA/DNR Appraisal Memorandum of Understanding. In addition, mitigation measures to reduce or eliminate adverse impacts on the resources affected by this project are identified in Chapter 3 of the EIS.
- 10046-014 Please see response to comment #10046-013.
- 10046-015 BPA has worked to place proposed towers in locations that have the lowest impact on existing wind turbine sites and agricultural improvement locations (i.e., irrigation equipment and appurtenant structures). Prospective wind generation and agricultural developmental uses would be evaluated and examined to see if these uses might occur in the future.
- Consistent with NEPA, the EIS for the proposed project analyzes the potential impact of the proposed project on existing land uses in Chapter 3 of the EIS. This analysis addresses impacts on existing land uses and conditions. Reasonably foreseeable future projects, including wind development, are considered in Chapter 4 of the EIS. Reasonably foreseeable future actions are those actions that are likely to occur and affect the same resource as the proposed action. The determination of what future actions should be considered requires a level of certainty that they will occur. This level of certainty is typically met for a proposed future project by completing a permit application, receiving approvals from local, state, or federal siting authorities being included in local or other planning documents, or other similar evidence. NEPA does not require an EIS to evaluate impacts to the “potential” for different types of future land use when no formal proposal has been made and many different future outcomes are possible. Please see response to comment #10046-013 concerning compensation issues.
- 10046-016 Please see response to comment #10046-013.
- 10046-017 Chapter 3 of the EIS discusses the possible impacts to the land uses and other resources crossed by the action alternatives. Some of these impacts (such as possible tree clearing, visual impacts, and reconfiguration of irrigation systems) can occur outside of the right-of-way. However, other than reserving the right to remove trees outside of the right-of-way that have the potential to fall or grow close enough to the conductors

Responses for correspondence #10046 are continued on the next page.

- to cause an electrical arc, BPA has no control over or restriction of land uses outside of the right-of-way. Also, please see response to comment #10046-013.
- 10046-018 Please see response to comment #10046-015.
- 10046-019 Please see responses to comments #10046-015 and #10046-017.
- 10046-020 Section 3.1 of the EIS analyzes the impact of the existing land uses along the proposed alternatives. In general, agriculture, grazing, and open spaces are uses that are compatible within transmission line rights-of-way.
- 10046-021 Over the years, BPA has built transmission lines through agricultural areas, taking measures to restore soils around tower sites, and farming has successfully continued. Tillage is an appropriate way to restore compacted soil. As stated by soil scientist Jeffrey Peters in a personal communication to BPA (2011):
- There are three commonly accepted purposes of tillage: (1) to kill weeds, (2) to manage crop residues, and (3) to alter soil structure (Foth 1984). Compacted cropland soils can be partially or fully restored to pre-construction conditions using either conventional tillage (plowing, from one to three passes with a harrow, crop planting if desired, and sometimes subsequent tillage with a cultivator) or by what's referred to as 'conservation tillage systems' (or the 'minimum tillage concept'). Conservation tillage systems all involve less tillage and typically minimize erosion (Brady 1984).
- With tillage, the lifting, twisting, and turning action of the plow leaves soil in an aggregated and loose condition. Ped stability, however, remains unchanged. As long as soil nutrients are not depleted from construction activities, tillage will generally create an opportunity for the soils to regain their original aeration, bulk density, and granulation properties. Soil moisture conservation should also increase and runoff and erosion will be minimized, especially if there is ample vegetative cover present.
- 10046-022 Fiber optic cable installed on BPA facilities falls into two categories: BPA-owned fiber optic cable, and foreign-fiber optical cable, which is cable not owned by BPA.
- Before foreign-fiber is installed on BPA facilities, BPA requires the customer to obtain easements along the entire right-of-way from each underlying landowner. Customers must also obtain all required permits to cross roads, highways, railroad rights-of-way, rivers, other utilities and federal, state, and tribal lands.
- Third party use of BPA-owned fiber optic cable is at the discretion of the Agency. BPA has the authority to lease excess fiber optic capacity under Section 2(e) of the Bonneville Project Act which explicitly gives the Administrator the authority to:
- ...sell, lease, or otherwise dispose of such personal property as in his judgment is not required for the purpose of this chapter and such real property and interests in land acquired in connection with construction or operation of electric transmission lines or substations as in his judgment are not required for the purposes of this chapter... (Bonneville Project Act, 16 U.S.C. 832a[e][1988][“section 2{e}”).

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providing communication links for the transmission project.

Wind Energy

10046-023

DNR manages Washington State Trust Lands under state law and is subject to the guiding principles and goals as set forth in our Department's Strategic Plan 2010-2014, "The Goldmark Agenda". One of the major goals is to strategically develop statewide renewable energy resources on state lands in an environmentally sound, economical, and sustainable matter. It is paramount DNR understands the full spectrum of both the distribution and transmission line connectivity of the utility grid systems, substations, and voltages. DNR also needs to understand how the BPA Big Eddy-Knight transmission line project relates to and impacts (both beneficially and adversely) our current and future development of wind generation and other developing renewable energy resources being considered across the landscape.

10046-024

The Draft EIS states that BPA **does not have** a region-wide program or plan related to wind or other generation projects in the area (p.1-8). However, BPA has clearly stated that this project is to meet the needs for energy transmission identified through the Network Open Season (NOS) process. Through the NOS process, 1,150 MW were requested in 2008 (p.1-4). The Final EIS needs to assess whether the proposed alternatives are meeting that need in the most efficient and environmentally sensitive way. The Final EIS should address how this proposal will impact future green energy development in the project area.

10046-025

- The Final EIS needs to show that the placement of the non-power generating line is not on lands that would be better served generating rather than transmitting the power.

10046-026

- The Final EIS should explain the connection between substations and wind power development. We understand that the project is responding to existing and potential wind power development yet there is no analysis that indicates which alternative best serves this development.

10046-027

- The Final EIS should explain the relationship of this project to future expansion of wind energy in eastern Washington so landowners and managers can anticipate the impacts of these decisions on future uses. For example will more substations be required as more wind energy comes on line?

10046-028

Other Land Use Restrictions

BPA's corridor will restrict or threaten trust management activities that occur inside and outside the right-of-way. Based upon BPA's pamphlet "Living and Working Safely Around High-voltage Power Lines," restricted activities include irrigation, wind tower replacement, some types of orchards, location of buildings and parking lots, recreation facilities, trails and fencing. DNR considers these restrictions, when applied outside of the right-of-way, to constitute a negative easement¹ that prevents DNR from fully managing state lands. Of particular concern are impacts to parcels that lie along the West and the East alternatives.

Appendix I.2.1 page 4 Paragraph 6, 7:

¹ An affirmative easement authorizes a use of a landowner's property. A negative easement prevents a landowner from using his/her property.

- 10046-023 Comment noted.
- 10046-024 As discussed in Chapter 1 of the EIS, this transmission line is being proposed in response to requests for transmission service through the project area, and would increase the reliability of the high-voltage transmission system in the area. Chapter 2 of the EIS describes alternatives to meet this need, including both alternatives considered in detail and alternatives considered but eliminated from detailed study. NEPA requires that these alternatives be evaluated for their potential environmental impacts, rather than for their efficiency in meeting the identified project need or for their environmental sensitivity. Nonetheless, in Table 2-6 of the EIS, BPA has assessed how well each of the alternatives considered in detail in the EIS meets the project purposes identified in Chapter 1 of the EIS. See response to comment #10046-025 concerning consideration of potential future renewable generation development in the project vicinity.
- 10046-025 Consistent with NEPA, the EIS evaluates the potential impact of the proposed project on existing land uses, both directly where the project would be located as well as in adjacent areas. NEPA does not require an EIS to prove that a proposed project would have higher value than various other speculative future uses that could some day be developed on the same piece of land where the agency's project is proposed. To the extent that there is reasonably foreseeable future renewable energy development in the project vicinity, the proposed project's potential impact on such development is addressed in Chapter 3 of the EIS, and the cumulative impact of the proposed line in combination with this development is addressed in Chapter 4 of the EIS. Please also see response to comment #10046-015.
- 10046-026 To clarify, the Big Eddy-Knight Project is being proposed to respond primarily to requests for firm transmission service across BPA's transmission system, as discussed in Chapter 1 of the EIS. As shown in Table 2-6 of the EIS, all action alternatives would respond equally well to these requests.
- 10046-027 As discussed in Section 1.2 of the EIS, this transmission line is being proposed to respond to existing firm transmission service requests that BPA has already received. These requests are primarily from already existing or already proposed wind projects in the region. While it is conceivable that some future wind projects in eastern Washington may request service over BPA's transmission lines at some future date, at this time it is unknown if, when, and where any such future wind projects may be proposed. It is also unknown whether any such speculative future wind development would require additional interconnection substations, or whether this development could interconnect to an existing BPA substation, or whether it would interconnect to a BPA substation at all. Since state and local authorities have siting jurisdiction over any future wind development in eastern Washington, these authorities would be the appropriate entities to consult concerning future decisions on siting future wind development in eastern Washington.
- 10046-028 Please see response to comment #10046-017.

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- 10046-029 | Exceptions to the 14-foot rule and restrictions of land use outside the right of way corridors are land use impacts that should be disclosed. DNR has discussed with BPA some special agreements to allow crossings under lines with equipment that may exceed 14 feet. DNR has identified potential crossings that may be needed on parcel 3 for future wind turbine development. Land uses, by the nature of severance by a transmission line, are restricted by the 14- foot rule as well as many other non-compatible activities. The Final EIS should include a discussion of the impacts that can result from these restrictions.
- 10046-030 | The first sentence in paragraph 7 is misleading: “BPA does not restrict land uses outside the right-of-way”. Activities that are not compatible with transmission lines must cease and then begin again outside the right-of- way. In most cases this is a serious handicap and often it may eliminate the desired activities outside the right-of-way due to the severance and break the lines cause (e.g., center pivot irrigation). This issue was raised on page 8 of PDEIS Final Comments of July 9, 2010, page 9-10 and was not addressed in Appendix I with regard to severance issues and mitigation (compensation) for such. Activities on agriculture parcels can and do change over time; transmission lines can make some future activities non-compatible. It is appropriate to assume these lands will continue for agriculture but the analysis should consider more types of agriculture besides the one that is occurring at this moment in time. Lack of options in place of this restriction would further limit DNR’s use of trust lands.
- 10046-031 | Current Uses/minor corrections
Appendix I.2.1 page 4 Paragraph 1:
Parcels 2 and 4 are dry agriculture and there is no fishing. Parcel 3 is used for range *and cereal grains/alfalfa production*.
- 10046-032 | Appendix I.2.1 page 5 Paragraph 1:
Replace the following sentence “DNR lands, as managed by the State of Washington, are not subject to local zoning regulations” With the following correction “DNR is subject to state and local zoning laws.”
- 10046-033 | Appendix I.2.6 page 9 Paragraph 4:
Parcel 3, in the NW ¼ contains 37 acres of leased cropland used for dryland cereal grain and alfalfa production.
- 10046-034 | Appendix I.2.6 page 9 Paragraph 5:
Parcel 4 access road acres need updating.
- 10046-035 | Range of Alternatives
Three line siting alternatives do not appear to be enough based on the explanations given in the Draft EIS for eliminating certain alternatives. There are variations within the remaining alternatives, but they are mainly engineering variations as opposed to variations that reduce impacts to environmental factors including land use. Alternatives are deleted due to impacts to federally designated National Scenic Rivers or a National Scenic Area. Although the federal designations have merit, both of them require less protection than a Washington State Natural Area Preserve. No compelling reason has been presented to prioritize them above the environmental preservation values of natural area preserves.
- 10046-036 | • Include a western alternative that completely avoids the Columbia Hills Natural Area

- 10046-029 Please see responses to comments #10046-015 and #10046-017. For any potential crossings of the transmission corridor that may arise in the future, BPA would cooperate with landowners to identify feasible locations for safe crossings of the corridor.
- 10046-030 Please see responses to comments #10046-015 and #10046-017.
- 10046-031 Appendix I of the EIS has been updated to reflect the change requested.
- 10046-032 Appendix I of the EIS has been updated to reflect the change requested.
- 10046-033 Appendix I of the EIS has been updated to reflect the change requested.
- 10046-034 Access roads acres have been updated in Chapter 3 and Appendix I of the EIS.
- 10046-035 BPA believes it has provided a reasonable range of alternatives in the EIS to permit a reasoned choice and has adequately explained its reasons for eliminating certain alternatives from further consideration in the EIS, consistent with NEPA requirements. The commentor's opinion concerning the respective sensitivities of federal and state specially designated areas is noted.
- 10046-036 BPA has included two action alternatives – the Middle Alternative and East Alternative – in the EIS that completely avoid the Columbia Hills Natural Area Preserve. As discussed in the EIS, the West Alternative was identified as a potential routing alternative for the proposed project precisely because it would follow an existing transmission line right-of-way, rather than requiring development of a new, additional right-of-way. In addition to following this already existing BPA right-of-way across the Preserve, there is also an additional about 15 miles of existing right-of-way outside of the Preserve that could be used by this alternative. Thus, BPA believes that it included sufficient alternatives in the EIS to permit a reasoned choice from among a reasonable range of project routing alternatives.

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10046-036
continued

Preserve (NAP) and lands, as much as possible, not included in the NAP that provide habitat for state sensitive species.

Section 2.6.4 page 2-31: It appears that BPA eliminated the Blockhouse Routing Option due to unwillingness to address trespass by three homes and the Project Patch facilities. Other lands will now be burdened because of the unlawful act of others and BPA's unwillingness to address the trespass. Trespass does not seem to be an adequate reason for not considering an otherwise viable alternative.

10046-037

The Draft EIS states "Three homes and the Project Patch facilities (a retreat center for troubled youth and their families) have been inadvertently built within the easement. Because several homes would have required removal and the other alternatives would not have this requirement, this option (Blockhouse Routing Option) was eliminated from detailed evaluation."

The cost to BPA of resolving trespasses should not be a primary criterion for eliminating alternatives when the result is increases the potential environmental impacts to other lands. This practice and approach is inconsistent with NEPA and SEPA for identifying a reasonable range of alternatives and for eliminating alternatives from detailed analysis. Additionally, it is unfair to landowners who do not trespass and encourages those who do by eliminating the risk of having a transmission line sited in their surroundings. It is a basic cost of doing business for all landowners and those with interests in land to address the impacts of trespass on land use.

- The Final EISs should acknowledge the cost of accommodating trespass and the impacts of greater encumbrances on landowners and land use who are not trespassing.

10046-038

Two substation siting alternatives seem minimal. There is no information that relates the locations of the substations to wind power development. The Final EIS should explain the connection between substations and wind power development. We understand that the project is responding to existing and potential wind power development yet there is no analysis that indicates which alternatives best serves this development.

10046-039

BPA should also note that DNR's preference is to have no access roads or transmission lines on DNR-managed trust lands.

10046-040

Special lands and special-status species

The Draft EIS does not objectively acknowledge the significance of the potential impacts of the transmission line expansion proposal crossing through the Columbia Hills Natural Area Preserve (CHNAP). The significance of the potential compromises to the protection of this critical preserve is minimized due to the Draft EIS not identifying the risks, disclosing the potential impacts, identifying specific potential mitigation for the preserve, and lumping the CHNAP issues into a combined category for recreation and conservation. The CHNAP is not a recreation area. It is a preserve that allows minimal non-invasive and very light touch recreation activity. Because of these concerns, the West Alternative is currently unacceptable to DNR.

- 10046-037 As described in Section 2.6.4 of the EIS, an existing 100-foot-wide vacant BPA easement was identified from line mile W18 from the Chenoweth-Goldendale line directly north to the Wautoma-Ostrander line. This easement was acquired in the late 1940s, was not used, was not in BPA's recent records, and was not patrolled. BPA considered using this easement, in conjunction with the purchase of an additional 50-foot-wide right-of-way, for the northern portion of the West Alternative. This route was referred to as the Blockhouse Option. Over the years, three homes and more recently the Project Patch facilities (a retreat center for troubled youth and their families) have been inadvertently built within the easement. Because several homes and the retreat center would have required removal, and the other alternatives would not have this requirement, this option was eliminated from detailed evaluation.
- 10046-038 As stated in Section 2.4.5 of the EIS, the proposed substation sites are in an area under the Wautoma-Ostrander line that is at the optimum electrical distance from BPA's Big Eddy, Wautoma, and Ostrander substations. This location would provide the maximum electrical system performance for a connection to the Wautoma-Ostrander line with a Big Eddy-Knight line. Also see response to comment #10046-026.
- 10046-039 Comment noted.
- 10046-040 BPA believes it has provided an objective analysis of the potential impacts of the West Alternative's options across the Columbia Hills Natural Area Preserve and to the resources found there. The impacts are disclosed in Sections 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6, and Appendix I of the EIS. Section 3.1 has been updated to acknowledge the Natural Area Preserve as a distinct category of land use. Appendix I has acreage impacts specific to the Natural Area Preserve parcel.

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For example:

- 10046-041 • In summary section S.3 Affected Environment, page S-5, and S.4 Environmental Impacts S.4.1 Land Use and Recreation, page S-7, there is no mention of the Columbia Hills Natural Area Preserve (CHNAP). The CHNAP provides special protection to plant species and rare ecological systems. The Draft EIS must acknowledge the presence of this NAP equivalent to other significant land uses and designations, i.e., national scenic areas, in order to establish an objective foundation for considering the potential for impacts to the NAP. The result of minimizing the importance of the CHNAP, though maybe unintended, is also reflected in the absence of its mention in Table 2-7, p.2-35 Summary of Environmental Impacts by Alternative, Land Use and Recreation. The impacts to the CHNAP should be distinguished in the impact analysis and in the summary of impacts for the West Alternative. Under the current organization in the Draft EIS which places the CHNAP under a subheading of Conservation and Recreation, which covers a multitude of primarily recreational lands, it leaves one wondering whether it is being given equal attention to its environmentally sensitive nature as that of a National Scenic Area.
- 10046-042 • The DNR would consider any expansion of the transmission line through the NAP to be “high” impact and not a reasonable alternative within the current range of alternatives.
- 10046-043 • In S.4.16, pg. s-17 Cumulative Impacts, the Final EIS needs to consider and disclose the incremental and cumulative impact on special status species within the CHNAP. The state legislature established the statewide system of natural areas specifically to provide protection for species and ecosystems that are at risk of disappearing as part of our natural heritage, such as rare plants and ecosystems, and approves the appropriation for the acquisition of these special lands as it did with the CHNAP.
- 10046-044 • In Ch.2, 2.2, pg. 2-3 Transmission Line Siting Land Use, the Final EIS needs to acknowledge the critical land use currently occupied by the CHNAP.
- 10046-045 • In Ch.2, 2.3.8, pg. 2-16 Maintenance, special attention should be incorporated into this discussion about the proposed management method that would be used in the CHNAP to ensure the primary objectives of the NAP are enhanced versus compromised and that any use is compatible with the preservation of the native species and plant communities.
- 10046-046 • In section 2.7, pg. 2-33 Comparison of Alternatives, although the West Alternative may have been designed to “minimize” impacts to the environment, DNR does not believe that the mitigation measures identified in Table 2-8, pages 2-41 to 2-46 adequately mitigate the impacts to the CHNAP. The Final EIS should identify mitigation measures that specifically address the potential for impacts to the CHNAP including:
 - 10046-047 ○ Special construction techniques
 - 10046-048 ○ Seasonal restrictions
 - 10046-049 ○ The provision of identifying and securing replacement lands
 - 10046-050 ○ Working with DNR Natural Areas staff to minimize the impacts including minimizing soil disturbance, ecologically optimizing sighting of any facilities, identifying appropriate seed or plant sources for revegetation
 - 10046-051 ○ Monitoring and response provisions
- 10046-052 • Table 3-1 confuses a Natural Area Preserve with a recreation and conservation area.
- 10046-053 • In section 3.1.2, pg. 3-14, 15, Environmental Consequences Land Use and Recreation, the

10046-041	The Summary and Section 3.1 of the EIS have been updated to acknowledge the Natural Area Preserve.
10046-042	Comment noted.
10046-043	Please see response to comment #10046-111.
10046-044	Chapter 2 of the EIS describes the proposed action and alternatives, and includes a section about the factors considered during initial line siting. Please see Chapter 3 of the EIS for a description of the affected environment, including the Columbia Hills Natural Area Preserve.
10046-045	Please see response to comment #10046-044. If a decision is made to proceed with the project, and if the West Alternative is chosen for the line route, maintenance techniques within the Natural Area Preserve would be outlined in a Maintenance and Operation Agreement between BPA and DNR.
10046-046	The mitigation measures have been updated to reflect examples provided, see Sections 3.3 and 3.6, and Table 2-8 of the EIS.
10046-047	Please see response to comment #10046-046.
10046-048	Please see response to comment #10046-046.
10046-049	Please see response to comment #10046-046.
10046-050	Please see response to comment #10046-046.
10046-051	Please see response to comment #10046-046.
10046-052	Table 3-1 of the EIS has been updated.
10046-053	The section referenced in the EIS has been updated to acknowledge the Natural Area Preserve as a distinct category of land use.

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10046-053 continued	CHNAP should be treated separately from the State Park. They are completely different in goals and management. Combining these land uses and impacts minimizes the potential impact to the CHNAP and the native plant species and rare plant communities protected in this area. These are theoretically irreplaceable lands. The Final EIS must acknowledge the importance of providing short and long-term protection to the CHNAP.
10046-054	• In section 6.2.2, pg. 6-10 Consistency with State Substantive Standards, the consistency portion offers no protection of special lands or special-status species represented in the CHNAP.
10046-055	• In section 6.2.7, pg. 6-12, Consistency with State Substantive Standards Land Use and Socioeconomics, a transmission line, by its nature, is incompatible with a NAP. The transmission line is a federal facility, not subject to state law, with a purpose incompatible with protecting rare plants and plant communities.
10046-056	• In section 6.2.9, pg. 6-13 Transportation and Access, the consistency determination is inadequate. The BPA requires access either across existing roads to the existing R/W on the western alternative or to build roads underneath the power line. Both choices could have significant impacts on the NAP over time. Road use and maintenance within the CHNAP should be discussed separately and specific mitigation developed from road use and maintenance outside the CHNAP.
10046-057	• The Final EIS should acknowledge that trespass does not equally impact all lands. The CHNAP is much more impacted by unauthorized access road use and will require the development of specific mitigation measures tailored to protection of the NAP.
10046-058	• Columbia Hills was selected, approved and acquired as a NAP because it has features (rare species and high quality ecosystems) that are rare and not-so-easy to come by. If there are negative impacts within the boundaries of the NAP, those 'losses' should be compensated and at a rate of greater than one-to-one. The impacts to the whole site are greater than the sum of the footprints of individual impacts. Acquiring replacement sites for the ecosystem types and the rare species should be a commitment.
10046-059	In Appendix I.2.3 page I- 6 Paragraph 8, confusing language. Washington Natural Heritage has officially identified and mapped these species; no "assumption" is necessary. The language appears to call into question the presence of these species by saying "presence could not be verified"; this is untrue, since official presence has already been determined by qualified experts. This language should be corrected to reflect previously known and verified facts. The reference to preserve "biologists" should be changed to preserve <i>ecologists</i> in the first sentence on page I-7.
10046-060	Unauthorized public access Many of the issues identified by DNR in the July 9, 2010 comments on the PDEIS have been incorporated in Section 3.1.2 Land Use and Recreation Environmental Consequences of the Draft EIS (DEIS). Unauthorized public issues and concerns were expressed on pages 10-12 of the DNR's PDEIS Final Comments of July 9, 2010. The Draft EIS states that impacts from unauthorized public access and use would be low. This has not been the case for other transmission lines and would

- 10046-054 Comment noted. To clarify, the purpose of Chapter 6 of the EIS is to identify state substantive environmental standards, and to discuss the consistency of the proposed project with those standards. If BPA were to proceed with the proposed project and select the West Alternative, BPA would coordinate with DNR about appropriate mitigation and protection of land values and special status species in the Columbia Hills Natural Area Preserve. Mitigation measures in Sections 3.3.3 and 3.6.3 have been revised.
- 10046-055 BPA believes that because there is already an existing BPA transmission line that passes through the Columbia Hills Natural Area Preserve, and because the West Alternative would follow this existing right-of-way, this alternative would not be incompatible with the Preserve. In addition, as discussed in Section 6.2.7 of the EIS, mitigation measures are identified in Section 3.1 of the EIS to further reduce impacts. Mitigation measures specific to special-status plant species and communities to avoid or reduce potential impacts of the project are identified in Section 3.3 of the EIS. As discussed in response to comment #10046-054, BPA would coordinate with DNR about appropriate mitigation and protection of rare plant species in the Preserve if the West Alternative is selected.
- 10046-056 Comment noted. The consistency evaluation in Chapter 6 of the EIS is intended to provide a general evaluation of the consistency of the proposed project with established state standards. Accordingly, BPA believes that the evaluation referenced by the commentor is adequate. Access issues specific to the Columbia Hills Natural Area Preserve are discussed in Appendix I of the EIS, and BPA is in the process of coordinating with DNR to reach agreement on mutually acceptable procedures for road use and maintenance.
- 10046-057 Trespass is addressed in Section 3.1 and Appendix I of the EIS. Unauthorized use of BPA's rights-of-way or access roads can affect any landowner, but BPA acknowledges DNR's opinion that trespass does not equally impact all lands. Appendix I lists potential mitigation measures specific to DNR lands, including those to prevent trespass.
- 10046-058 Please see response to comment #10046-046.
- 10046-059 Although field surveys for the project could not verify the presence of some special-status plants along the existing and proposed parallel right-of-way through the Natural Area Preserve, BPA acknowledges that weather was likely the reason and plant blooms were likely missed. Therefore, BPA based the analysis on existing plant data in the area. The section referenced has been updated.
- 10046-060 Please see response to comment #10046-057. Section 3.1.2 has been updated to reflect DNR's belief that trespass on DNR land would create moderate-to-high impacts.

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- 10046-060 continued
certainly not be the expected outcome in this case. BPA needs to list positive actions to eliminate or mitigate these impacts by dedicating an ongoing and long-term budget to this issue and have a pro-active plan in place to prevent future occurrences rather than react to abuses as they develop and are brought forward, at expense, by the DNR. Generally, BPA's past performance in this area has been poor for DNR managed lands (e.g., Sappho line in Olympic Region, Coleman area in Southeast Region, and many others). DNR believes the impacts from this type of unauthorized use are **moderate to high** under the current plan.
- 10046-061
Unauthorized/undesired uses will increase over time, not remain constant or decrease; this is the case on virtually all BPA transmission lines that cross DNR lands. The impacts will be ongoing and they will be significant; the Draft EIS states they will be infrequent and low, which is **not correct** by any measure.
- 10046-062
The Draft EIS on pages 3-10 and 3-11 discusses DNR's concerns about unauthorized public access; however, this discussion appears to be limited to lands within the right-of-way easement. There needs to be mention of the long-term impacts, especially trespass and vandalism, which adjacent land ownership is exposed to because of the right of way. Access roads through the right of way provide public access, which can subject the adjacent ownership to increased fire danger, vandalism, garbage dumping, erosion, etc.
- 10046-063
As is mentioned above under Special Lands and Special-status species, the Final EIS should acknowledge that trespass does not equally impact all lands. The Columbia Hills Natural Area Preserve (NAP) is much more impacted by unauthorized access road use and will require the development of specific mitigation measures tailored to protection of the NAP.
- 10046-064
Besides posting signs and installing gates to discourage unauthorized recreational vehicular travel and subsequent weed seed transport, BPA should commit to allocating resources and prepare long term plans to help the grantors mitigate damages from unauthorized use and the common damages associated with trespassing. Those resources should include posting and maintaining new signs and gates when new/other access points are used by trespassers that were not considered during the construction phase. BPA should share in the responsibility of installation of gates, culvert replacement, access roads, etc., for environmental and resources protection measures into the future. The Final EIS should acknowledge that BPA sole use roads on trust lands present a long term management risk and burden that will require funding and cooperation to remedy.
- 10046-065
DNR maintains a zero tolerance of BPA access road unauthorized use abuses. Future abuses connected with BPA roads and right of ways, if left to develop, are uncompensated costs to the DNR and create a negative easement environment.
- 10046-065
DNR acknowledges the additional potential mitigation measures that have been incorporated into Appendix I that could address the issues represented in the following concerns.
- Survey existing power lines on DNR-managed lands in the vicinity and document

10046-061 Please see response to comment #10046-057.
10046-062 Please see response to comment #10046-057.
10046-063 Please see response to comment #10046-057.
10046-064 Please see response to comment #10046-057.
10046-065 Please see response to comment #10046-057.

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10046-065 continued	unauthorized use and damage to state lands and public resources. Use this survey to predict damage on proposed lines. Include costs to repair or mitigate predicted damage or identify effective mitigation that could be added that would avoid unauthorized use and damage. • Design the corridor to prevent trespass. • Develop and implement a cooperative management plan with DNR to reduce unauthorized access to the corridor. • Regularly inspect for trespass and trespass damage. • Repair trespass damage promptly, especially resource damage. • Maintain signs that discourage unauthorized use of the corridor. • Survey the easement corridor and clearly mark it so that BPA, contractors, adjacent landowners and the public can clearly recognize when they are within the corridor to prevent uncompensated corridor expansion, vegetation management conflicts, and to reduce trespass. • Clarify and disclose the responsibilities, roles, and plans BPA proposes to help prevent and assist grantors in managing these real issues. (Thank you for incorporating language in Appendix I that lists several potential mitigation measures on DNR-managed trust lands for the concerns bulleted above.)
10046-066	In addition: • There needs to be mention of the long-term impacts, especially trespass and vandalism, which adjacent land ownership is exposed to because of the right of way.
10046-067	• Identify existing recreation uses of state lands and analyze the impacts of the proposal on the recreational uses of state lands.
10046-068	• Increase mitigation for protection of the Columbia Hills Natural Area Preserve.
10046-069	Geologic Hazards In section 3.4 Geology and Soils, impacts to landslides, liquefaction, and earthquakes are disclosed. Mitigation measures are addressed which include twice a year inspections to determine if movement might be occurring. Impacts are addressed by a scale of low to high. • The EIS needs to explain what is defined as low, moderate and high on the scale of impacts. The EIS should clearly indicate the different mitigation/monitoring measures in place for the various impact levels. Although various impacts have been identified from low to high, mitigation for these various levels of impact need to be separated or addressed.
10046-070	Roads The need for roads is discussed throughout the Draft EIS. DNR's road system is a valuable asset to the trusts. Use of the roads by the project proponent contributes to increased road maintenance and replacement needs. DNR wants to ensure BPA contributes fairly to maintenance and is equitable in sharing responsibility or shouldering responsibility for impacts that result from BPA's construction, management and use of roads.

- 10046-066 Please see response to comment #10046-057.
- 10046-067 Impacts to recreation are addressed in Section 3.1 of the EIS.
- 10046-068 Please see response to comment #10046-046.
- 10046-069 Section 3.4 of the EIS analyzes the potential impacts to soil and geology. As with all resource sections, impacts are summarized into levels of no, low, moderate, or high within the context and intensity of the specific situation. Unless otherwise stated, the mitigation measures provided would apply to all situations to lessen or avoid potential impacts.
- 10046-070 Appendix I of the EIS has been updated to reflect more recent on-going discussion between BPA and DNR regarding use of access roads across DNR lands.

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- 10046-071 Historically, BPA roads have not been designed to minimize their long-term environmental impacts. BPA roads readily degrade creating a variety of environmental issues including erosion leading to sedimentation. Using recognized road guidelines for the design, construction and maintenance of roads reduces environmental impacts. This Draft EIS does not reference any comprehensive road guidelines. Guidelines must target environmental impacts as well as safety concerns.
- 10046-072 BPA requires a transportation system that allows road access to the corridor twenty-four hours a day, seven days a week and in all seasons. BPA's actual use of that system may be limited, but BPA needs the system in place and functional. That requires constructing roads to a high standard and actively maintaining them. It also requires BPA to work cooperatively with the road owners and users to maintain the system. Although the Draft EIS has included several new mitigation measures in the Transportation and Geology and Soils sections that address the need to design roads properly and inspect and maintain roads regularly, the Draft EIS does not provide nor does it reference a complete set of road design standards (outside of those included in Appendix I for DNR-managed trust lands) that would mitigate the potential impacts from long-term use of roads e.g., mass failures and sedimentation.
- Considering the significant impacts that access roads can have on the environment, it is necessary and reasonable that BPA identify specific road design parameters and "Best Practices" under which they will abide in the design, construction or reconstruction, and maintenance of roads associated with any transmission line proposal. (Thank you for the current progress made in establishing a statewide Memorandum of Agreement for compatible BPA use of DNR-managed trust lands.)
- 10046-073 Throughout Vegetation, Geology and Soils, Water Resources and Wetlands, and Fish are conclusions of "no-to-low," "minimal," "little", and "low" impacts to these resources and elements of the environment that could result from BPA's short-term and long-term operations and maintenance of the transmission line and associated access roads.
- Because these activities typically encompass road maintenance, vegetation management, and emergency repairs with heavy equipment, their impacts can be substantial. Roads will need to be re-rocked; cyclical weather events will occur; lines will need to be repaired; and lines will be upgraded. As with all other BPA projects and EISs the analysis should include specific attention to maintenance and operations that extend over the life of the project. Assumptions should not be made that impacts are limited to the construction phase. BPA should use existing records to predict the types and extent of activities that will occur in the future.
- 10046-074 The Draft EIS generally incorporates more discussion and disclosure of the short-term and long-term impacts from roads than was discussed in the PDEIS and has added a mitigation measure in 3.10.3 Transportation "Conduct regular maintenance on access roads and gates within and leading to the corridor." The Draft EIS has added language that commits to "Design roads to limit water accumulation and erosion..." in a mitigation measure to 3.4.3 Geology and Soils. However, greater specificity on the road design standards and consistency in identifying the

- 10046-071 Contrary to the commentor's assertion, there are actually a wide variety of types and conditions of BPA access roads throughout BPA's transmission system, most of which are extremely well designed and maintained. While it may be true that some of BPA's older access roads (some of which have been in existence for 60 years or more) were not necessarily initially designed with environmental protection as a primary consideration, all BPA access roads designed in the past few decades have included environmental considerations. In fact, consideration of environmental impacts has been an essential part of the road design process since at least 1987, when BPA adopted its Access Road Planning and Design Manual. BPA is also continually working on improving older access roads throughout its access road network to address environmental and other issues as they arise.
- Chapter 2 of the EIS describes the proposed project, including access roads, but does not describe the facilities in design specification detail. Potential impacts from access road construction (including new roads, temporary roads, or existing road upgrades) as well as long-term maintenance of access roads is addressed throughout Chapter 3 of the EIS in the appropriate resource sections. Section 3.4 of the EIS lists aspects of road design that would mitigate potential erosion impacts from roads. BPA believes that the EIS accurately characterizes and assesses the potential direct and indirect effects of the proposed project's access roads and the mitigation measures provided are of sufficient detail. BPA and DNR are in the process of negotiating a Statewide Rights-of-Way Memorandum of Agreement (MOA) intended to comprehensively address BPA transmission line operations and maintenance compatibility with trust land management, including the use and standards for access roads.
- 10046-072 Please see response to comment #10046-071.
- 10046-073 The EIS does not limit the impact analysis to the construction phase of the project. Typical maintenance activities, based on BPA historic information of what is required, are described in Section 2.3.8 of the EIS. Potential impacts from maintenance activities are addressed throughout Chapter 3 of the EIS in the appropriate resource sections. Unusual weather event damage, line upgrades, or road reconstruction are not considered routine maintenance and would trigger additional environmental review for site-specific issues to ensure that appropriate analysis and mitigation measures are addressed and implemented.
- 10046-074 Comment noted.

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mitigation in the various sections of the Final EIS is needed regarding the proposed mitigation.

The DNR has provided in a separate letter regarding “state substantive standards” and a link to the [2010 Forest Roads Guidebook](#). The standards in this guidebook provide BMPs primarily for forest hauling. Although the guidebook is not specifically targeted to the minimum standards required for BPA’s use they would serve as a good starting place for BPA to develop standards and could serve as a default until BPA develops standards.

The proposal should include and the Final EIS should describe these possible mitigation measures:

- Road design standards to be used.
 - The Final EIS should describe “Best Available Science” and “Best Practices” in more detail so the reader can understand how access road design will minimize near term and future adverse environmental impacts.
 - Define minimum road radius curves designed to carry equipment and tower materials to the construction site. Where full bench roads are needed for construction, describe: how and where the end haul would be disposed; the maximum grade of access roads for favorable and unfavorable haul; the need for variable road widths R/W required for steep slopes and other features requiring wider R/W; what constitutes a temporary road and how are they maintained; and, besides the helicopter patrol, what ground patrol or inspections and frequency are planned for the long term road maintenance to prevent periodic or storm related environmental damages.
- Development and implementation of a plan for the improvement of substandard access roads, regular maintenance of access roads and abandonment of roads no longer required both within and outside the R/W constructed by BPA. The plan should require regular inspections of roads and special inspections during significant rain events;
- The need to develop and implement a plan for the improvement of substandard access roads, regular maintenance of access roads and abandonment of roads no longer required both within and outside the R/W constructed by BPA. The plan should require regular inspections of roads and special inspections during significant rain events;
- Mitigation to limit the acres where heavy equipment will be used including use of helicopter installation to minimize impacts to soils.
- BPA should identify what type of long term on-the-ground maintenance and inspection measures will be conducted by BPA for long-term environmental protections for weed control, road maintenance, and culvert maintenance on access roads within and outside the R/W.

Although Appendix I shows significant progress addressing the need to provide mitigation of roads on DNR-managed trust lands, it still needs to consider and address the impacts that new roads will have on DNR maintenance costs, wildlife habitat, income-generating activities, wildfire, and unauthorized public use. Poorly designed roads may degrade Trust land value and uses and expose DNR to regulatory actions.

10046-075 Please see response to comment #10046-071.
10046-076 Please see response to comment #10046-071.

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10046-077 BPA has on this project already provided road design information and coordinated with DNR on the placement of roads on trust lands and this should be reflected and noted in the Final EIS. This, however, does not ensure cooperation in the future if new roads are built within the corridor. Agreeing to “coordinate” with DNR or allowing DNR to “review” the road designs to identify concerns is not the same as agreeing to road designs that meet DNR’s needs as well as BPA’s.

- The Final EIS should identify the goal of coordination is to arrive at road designs that meet both DNR’s needs and the needs of BPA and that DNR will review road designs and coordinate with BPA to ensure those designs adequately protect trust assets and avoid regulatory, environmental, and other liabilities.

10046-078 Appendix I.2.4 page 8 Paragraph 5 Correction:
Please see HDR final designs for Cannon Wind Parcel, Section 36 T12-R15E, line mile 15 sheet 209. There are three culverts in the road plan crossing three drainages. This is “alternative 2” for access to tower 15/5; the preferred alternative is “alternative 1” which does not cross these drainages. There are drainages on the DNR parcels that potentially may be crossed which may or may not affect fish downstream due to the potential entrainment of sediments. No culverts are proposed for alternative 1, even though small drainages are indeed crossed. It is unknown if hydrologic events could cause sediment delivery to fish-bearing waters.

The EIS should document the use of BPA/DNR recently agreed upon Best Practices.

Vegetation Management, Herbicides and Noxious Weeds

The Draft EIS recognizes the issue and concern for the existence and spread of noxious weeds. (Thank you for the current inclusion of Appendix I that proposes mitigation to address the vegetation management issues on DNR-managed trust lands).

10046-079 Ground disturbance, road and tower construction and transmission line rights of way have been known to be significant carriers of both noxious and invasive weeds and spread well beyond the R/W corridor onto adjacent lands. BPA should describe what long term resources and logistical support BPA will commit to assist county weed boards and landowners in the control of noxious and invasive weeds that have been brought in via the R/W roads and corridors. .

The construction of transmission lines and the use of roads substantially increase the risk of introducing noxious weeds and other undesirable vegetation. It will be critical for BPA to be clear about proposed vegetation management activities that will occur within and outside of the right of way.

The DNR recognizes and acknowledges the increased detail incorporated into the discussion of potential impacts citing the vulnerability from construction and maintenance to noxious weed infestations and the transfer of weed seeds from one location to another throughout the life of the project (page 3-62). However, the mitigation measures proposed on page 3-70 do not adequately address the long-term issue of controlling the spread of noxious weeds on all lands. The

- 10046-077 Please see responses to comments #10046-012, #10046-070, and #10046-071.
- 10046-078 BPA has consulted with DNR representatives regarding access road designs for the East Alternative's Tower 15/5 and has agreed to use the DNR-preferred design solution.
- 10046-079 Please see responses to comment #10040-002. Mitigation measures in Section 3.3 of the EIS have been updated to more clearly define BPA's actions to help control the spread of noxious weeds.

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10046-079 | environmental impacts and mitigation measures proposed in the Draft EIS are disproportionately
continued | focused on the construction phase. Additional mitigation measures are needed to mitigate
impacts from noxious weeds for the long-term operational life of the project on the entire project.

10046-080 | BPA's need to prepare a Supplement Analysis (SA) for vegetative management activities on each
of BPA's lines is unclear. The SA's are often vague and do not account for complying with state
law. Even where BPA may not have to comply with state law, the landowner does. DNR is
subject to weed control laws Weeds Title 17 RCW and to Forest Practices Title 222 WAC for
herbicide applications. DNR cannot authorize BPA to violate county or state law by adhering
only to Federal laws regarding herbicide use.

Request for analysis or for consideration in the Final EIS of possible mitigation:

- 10046-081 | • In Chapter 6.3 Washington Department of Fish and Wildlife Standards, The Draft EIS
states "BPA controls weeds in accordance with federal, state, and local laws (see Section
3.3 Vegetation)", however, in Section 3.3 Vegetation there is no such language. For
clarity this language should be included as a mitigation measure in Section 3.3.
- 10046-082 | • In Appendix I, page I-7 paragraph 4 the word "all" should be inserted: "...and all other
applicable State and Federal regulations.
- 10046-083 | • Add mitigation to the list of mitigation measures on page 70 that commits BPA to near-
term and long-term control of the spread of noxious weeds "during and after construction
and throughout the life of the line." See page 3-62 of the Draft EIS.
- 10046-084 | • BPA should clarify in the Final EIS the criteria used to determine when a SA is required.
- 10046-085 | • The Final EIS should discuss BPA's intent to voluntarily comply with weed control laws
Weeds Title 17 RCW, especially where the underlying landowner is liable and where the
effects go beyond the right of way or as mentioned above - include the statement in
Section 3.3 that "BPA controls weeds in accordance with federal, state, and local laws."
- 10046-086 | • Substation sites – The Final EIS should identify what control measures are/will be
developed during elimination of all vegetation in these areas to decrease herbicide air
drift and water runoff of the soil sterilizing herbicides outside the substation site and on to
adjacent agricultural lands.
- 10046-087 | • Acknowledge and discuss the long-term impact to the adjacent land ownership attributed
to reserved rights by the grantee to remove timber, brush, etc. outside of the right-of-way.
- 10046-088 | • In Appendix I, section 2.3 page I-7 amend the sentence including "...as well as
reseeding disturbed areas with desirable plants to limit noxious weed germination."

State Owned Aquatic Lands

10046-089 | All alternatives will cross State Owned Aquatic Lands (SOAL) and must be authorized by DNR.
Aquatic crossings have the potential to negatively impact critical habitat including threatened
and endangered salmon spawning and rearing habitat. DNR has concerns that improperly
managed rights-of-way may result in the removal of excessive amounts of riparian vegetation and
habitat near the shoreline, thereby increasing the potential for erosion, sedimentation and
turbidity in the aquatic environment. DNR Aquatics Program would like to be informed on
BPA's proposed Best Management Practices for vegetation management in its rights-of-way near
any water body where SOAL are located.

- 10046-080 Appendix I of the EIS has been updated to clarify BPA's use of SAs for vegetation control activities.
- 10046-081 Section 3.3 of the EIS is referenced in Section 6.3 to provide more detail about noxious weed impacts and mitigation measures.
- 10046-082 The word "all" has been inserted.
- 10046-083 Please see response to comment #10046-079.
- 10046-084 Please see response to comment #10046-080.
- 10046-085 Please see response to comment #10046-079.
- 10046-086 Vegetation would be eliminated from the Knight Substation site by the excavation required for site development; no soil sterilization techniques are used during substation construction. As outlined in Section 2.3.8 of the EIS, BPA's vegetation management would be guided by its Transmission System Vegetation Management Program EIS and Record of Decision. Additional information has been added to this section to clarify vegetation maintenance needs in substations. Herbicide treatments would always follow label instructions, including application rates, appropriate weather conditions, and application techniques that limit the possibility for over application and runoff or drift.
- 10046-087 Section 3.1 of the EIS discusses the impacts to land uses from restrictions within the right-of-way, as well as the need for vegetation clearances outside the right-of-way.
- 10046-088 Appendix I of the EIS has been updated to reflect the suggested language.
- 10046-089 The State Owned Aquatic Lands applicable to the project are on the Washington side of the Columbia River. BPA is coordinating with DNR concerning any necessary easement for the proposed project across these lands. As described in Section 3.5 of the EIS, no riparian vegetation along the Columbia River would be removed for any of the alternatives. The proposed facilities would be 250 to over 500 feet (depending on the alternative) from the edge of the Columbia River.

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- 10046-090 DNR may propose habitat stewardship measures to help lessees reduce the environmental impacts of activities that occur in the nearshore environment including:
- Shade
 - Compaction and disruption of the sediments
 - The disruption of littoral movement (the natural movement of sediments)
 - Underwater noise that can disrupt important species when they are most vulnerable
 - The release of contamination and waste
- 10046-091 BPA will need to coordinate with DNR to ensure any pre-construction, construction, post-construction activities, and ongoing maintenance, complies with any relevant standards for covered fish, wildlife, and aquatic vegetation located in the proposed project area.
- 10046-092 Requests:
- Perform a Cultural Resource Assessment – Section 106 consultation for all crossing locations.
 - Consult with affected tribes.
 - Define BPA's proposed Best Management Practices for vegetation management in its rights-of-way near any waterbody where State Owned Aquatic Lands are located.
- 10046-093
- 10046-094
- 10046-095 **Forest practices/water resources**
Timber harvest in some of the woodland areas described in the Draft EIS would be subject to a Forest Practices permit. This would be cutting of merchantable timber in the riparian areas and/or in the uplands where Oregon White Oak and Ponderosa Pine trees will be harvested. However the Draft EIS appears to be inconsistent in whether harvest of trees in riparian areas will occur.
- 10046-096 In section S.4.5, pg. s-10 Water Resources and Wetlands the Draft EIS states "Although there would be some vegetation removed in new rights of way, there would be no shade reduction to waterways." Also this statement is reflected in the Fish section S.4.7, pg. s-12 and on page 3-114 "All tree removal would be upland from stream edges and would not impact shading on water surfaces."
- These statements appear to be inconsistent with the analysis in other parts of the Draft EIS. Please refer to the following sections for apparent inconsistencies in the analysis of impacts from vegetation removal potentially causing temperature changes and impacts to water resources and fish: Table 2-7, pg. 2-35 Summary of Impacts by Alternative, west alternative for Water Resources and Wetlands; and Section 3.5.2, pg. 3-86 Environmental Consequences Common Impacts Water Resources that anticipates some tree removal at Threemile Creek.
- 10046-097 On pages 3-70, 3-93, and 3-117 mitigation measures are listed for Vegetation, Water Resources and Wetlands, and Fish which address seeding of native plants and seedlings for erosion and weed control. Nowhere is replanting of trees for shade (temperature control) of streams like the

- 10046-090 Comment noted. Please see response to comment #10046-089.
- 10046-091 Comment noted. Please see response to comment #10046-079.
- 10046-092 As described in Sections 3.8 and 5.14 of the EIS, BPA is conducting 106 consultations for the entire project, which includes crossing locations. Also, see response to comment #10046-079.
- 10046-093 BPA is consulting with affected Tribes for the entire project. Also, see response to comment #10046-079.
- 10046-094 Please see response to comment #10046-089.
- 10046-095 The Forest Practices Act requires a permit from a “forest landowner,” “timber owner,” or “operator” conducting forest practices on private or state forestland in Washington State (RWC 76.09.020.050). This permit does not apply to BPA as a federal agency. In addition, based on correspondence from DNR (March 6, 2002), it is BPA’s understanding that the definitions of “forest landowner,” “timber owner,” and “operator” do not include the federal government (RCW 76.09.020[16]). BPA would provide DNR with notice for those areas where trees would need to be removed. BPA would also provide DNR with copies of applicable easements, if requested by DNR, which would verify that BPA has jurisdictional control over the removal of the trees (not the underlying landowner).
- As described in Section 3.3 of the EIS, some trees would require removal (see responses to comments #10046-096 and #10046-097.
- 10046-096 The text has been clarified to reflect possible shade tree removal at Threemile Creek, an intermittent, non-fish bearing stream.
- 10046-097 No shade trees would be removed at the stream crossings mentioned. In addition, planting trees within a right-of-way where trees were removed for electrical clearance and safety would be contrary to BPA’s vegetation clearance needs.

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10046-097 continued	Little Klickitat River and Swale creek addressed. Shade is a critical component to maintaining viable fish stocks in Eastern Washington.
10046-098	This proposal is in the Bull Trout overlay zone. WAC 222-16-010 (Bull Trout habitat overlay) describes the zone of influence and WAC 222-30-040 (Shade requirements to maintain water temperature) provides the protection required. Mitigation needs to be provided that if shade trees need to be removed from streams for the project, planting and maintenance of species of lower growing shade trees next to streams will be provided for the appropriate shading of the streams. Lower growing shade tree species are available that shouldn't interfere with the overhead power lines.
10046-099	Cultural resources In Appendix I section 2.5 pages 8,9 Minor correction: As per LUL 50-085744 dated 4/15/2010, BPA did have permission to enter properties to conduct a proper survey.
10046-100	The Big Eddy-Knight EIS will not be adoptable under SEPA without a completed cultural resources survey. Please keep the DNR informed of any surveys planned and the results of any surveys conducted on DNR-managed trust lands.
10046-101	Fire Prevention There are many references in the Draft EIS acknowledging the risks of fire related to the proposed project to personal injury, possible outages and other safety concerns. There are several mitigation measures addressing the need to mitigate the risk of fire in 3.3.3 Vegetation Management; 3.6.3 Wildlife; 3.9.3 Socioeconomics; and 3.12.3 Public Health and Safety. The proposed mitigation for the prevention of fire is generally limited to a commitment to "prepare for fire management and fire control", and more specifically to "preventing fires that could encourage weed growth" by equipping "...all vehicles with basic fire-fighting equipment, including extinguishers and shovels..." The consistency statement in section 6.2.10 Public Health and Safety - Department of Natural Resources – Consistency with State Standards is limited to the period of construction "BPA is committed to reducing the potential for fire during construction. See Sections 3.3 Vegetation and 3.12 Public Health and Safety for mitigation measures identified to minimize potential health and safety risks from fire". This consistency statement is also limited by the overly general commitments made in the mitigation measures for these subject areas.
10046-102	Mitigation should include the following for the prevention and spread of wild fire: - Depending on the time of year (closed season is April 15 – October 15) and type of activity, there may be other requirements (e.g. one hour fire watch, pump truck and trailer) that need to be implemented. - Institute a fire prevention plan beginning with the construction period and extending over the life of the project that is developed with DNR and county fire districts. Fire

- 10046-098 As discussed in Section 3.7 of the EIS, the project would not remove shade trees along fish-bearing streams.
- 10046-099 Cultural resource surveys were conducted in 2009 and early 2010. Permission to enter DNR property was not granted in time for this first phase of cultural resource surveys. BPA has conducted a second phase of cultural surveys, which includes the DNR parcels where permission was granted.
- 10046-100 Please see response to comment #10046-099.
- 10046-101 Please see response to comment #10046-102.
- 10046-102 The proposed project would be on lands, primarily dry grassland and agricultural fields, that are susceptible to wildfire and adding this project to the landscape could, therefore, result in an increase in the potential for wildfire. However, this increase in potential would be small given that vegetation height would be maintained at a safe distances from the conductors, access for operation and maintenance would normally be limited, and BPA would work with landowners to limit unauthorized access to new roads and the right-of-way, as appropriate.
- Prior to start of any on-site work for each contract or release, BPA would require its construction contractor to provide a site-specific safety plan to identify and mitigate any recognized hazards or conditions. The construction site and nearby conditions shall be considered. All significant hazards shall be identified. Unusual or unique hazards or conditions specific to the contract or release, known by BPA, would be identified in the technical specification. In particular a fire plan would be developed that would comply with fire related restrictions, fire fighting tools on site (shovel, Pulaski, water pack, water trucks) etc. The provisions of the BPA Manual Chapter 188: BPA Fire Protection Program, apply to all BPA offices and contractors performing work for BPA as provided by law and/or contract and as implemented by the appropriate contracting officer.

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- 10046-102 continued
- prevention requirements should be included in all contracts. BPA and contractors should observe fire shut downs.
- 10046-103
- Develop and institute or commit to developing and instituting a fire prevention plan for maintenance and operations of the line on all lands for the life of the project. (Although, significant headway is being made on DNR-managed trust lands with respect to fire prevention as is noted in Appendix I, it should also be noted that DNR is responsible for all lands in addition to trust lands that are under fire protection laws in 76.04 RCW.)
- 10046-104
- Avoid siting in areas prone to lightning strikes, consider and use fire history information from BPA, DNR and fire districts on existing lines to guide fire prevention on the proposed line. (DNR has lightning strike and fire history maps).
- 10046-105
- Make a clear commitment to coordinate with appropriate fire protection agencies to assure all activities conducted follow current fire protection laws for the entire project.
- 10046-106
- For DNR jurisdiction, BPA should coordinate with DNR Southeast Region to assure that activities conducted on DNR fire jurisdiction (inclusive of DNR trust lands and other lands under DNR's protection) meet 332-24 WAC and 76.04 RCW.

Cumulative Impacts

10046-107

State trust lands have been heavily encumbered over the years by public projects such as transmission lines, dams, state and federal highways and pipelines. These lands have been preferred to other federal, state and private lands for several reasons: They tend to be lower value because they are undeveloped; they are often in large blocks allowing more corridor length to be obtained from fewer landowners; and DNR has traditionally had an easier authorization process than other government landowners. DNR lands are currently encumbered with over 800 BPA easements. These are lands where the state has been compensated for the original encumbrance but continues to be negatively impacted by the corridor. Uncompensated costs include administrative time, maintenance of jointly used roads, resource damage from unauthorized use and reductions on the productivity of lands adjacent to the corridor.

10046-108

The cumulative impacts of BPA transmission lines on state trust lands should be addressed as a Land Use impact characterized by ownership occurring throughout the state and the incremental and cumulative impacts to its use and productivity mounting with each new transmission line project. This should include the long-term loss of revenue to the trusts and the land use impacts to activities inside and outside the right-of-way that result from vegetation management, safety concerns and other restrictions, unauthorized use, and maintenance and management of roads.

- 10046-109
- The cumulative impacts section should include:
- An assessment of the cumulative impacts to the State Trust Land corpus should be conducted under the Land Use or the Socioeconomics category.
- 10046-110
- A temporal boundary for transportation that reflects the transportation resource analysis in other parts of the document, i.e., the need to conduct regular maintenance on access roads and gates within and leading to the corridor for the life of the project (See page 3-143).
- 10046-111
- Consider and disclose the incremental and cumulative impact on special status species within the CHNAP. The state legislature established the statewide system of natural

- 10046-103 BPA and DNR propose to develop a mutually agreeable fire prevention and suppression plan that addresses managing and controlling the risks of wildland fire from construction, operation, and maintenance of the transmission line. This agreement may be contained within the Washington Statewide Rights-of-Way MOA currently being developed.
- 10046-104 Comment noted.
- 10046-105 BPA fully intends to comply with any applicable fire prevention laws and rules during project construction, operation, and maintenance. Regardless of the source of such laws and rules, BPA's overarching objective in this area is to take all necessary precautions and measures to avoid causing or contributing to wildfires from its activities. BPA would coordinate with local fire districts and other appropriate emergency responders to develop a Fire and Emergency Response Plan that addresses potential wildland fires and other emergencies.
- 10046-106 BPA would coordinate with DNR's Southeast Region to assure that activities conducted on DNR lands meet their fire protection requirements.
- 10046-107 The views of the commentor concerning land encumbrances and compensation are noted.
- 10046-108 BPA believes that the cumulative impact analysis included in Chapter 4 of the EIS covers an appropriate geographic scope for potential cumulative impacts related to the proposed project, and a state-wide cumulative impact analysis as suggested by the commentor is beyond the scope of this project-specific EIS. However, as discussed in Appendix I of the EIS, BPA and DNR are addressing the statewide effect of BPA's transmission facilities on DNR-managed lands through statewide agreements between the two agencies. One of these agreements is an Appraisal Memorandum of Understanding (MOU) for DNR-managed lands that was entered into in August 2010. This Appraisal MOU provides a mutually acceptable methodology for appraisals of DNR-managed lands crossed by BPA's transmission facilities such as the proposed project. BPA and DNR are also in the process of negotiating a Statewide Rights-of-Way MOA intended to comprehensively address BPA transmission line operations and maintenance compatibility with trust land management.
- 10046-109 Please see response to comment #10046-108. The Land Use and Recreation discussion in Section 4.2 of the EIS has been revised to more specifically reference cumulative impacts to DNR-managed lands in the project vicinity.
- 10046-110 Comment noted. Table 4-1 and the Transportation discussion in Section 4.2 of the EIS have been revised to reflect that access issues could occur for the life of the line, and to include information concerning the proposed project's contribution to cumulative property access impacts.
- 10046-111 The potential impacts of the proposed project on special-status species in the project vicinity, including in the Columbia Hills Natural Area Preserve, are discussed in Sections 3.3 and 3.6 of the EIS. Appendix I of the EIS provides more specific information on potential impacts related to the Preserve. Cumulative impacts, including in the Columbia Hills Natural Area Preserve, are discussed in Chapter 4 of the EIS. The Vegetation and Wildlife discussions in Section 4.2 of the EIS have been revised to more specifically discuss potential cumulative impacts related to special-status species.

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- 10046-111 continued areas specifically to provide protection for species and ecosystems that are at risk of disappearing as part of our natural heritage, such as rare plants and ecosystems, and approves the appropriation for the acquisition of these special lands as it did with the CHNAP.
- 10046-112 We appreciate the acknowledgement of the potential for impacts to the additional multiple resources (vegetation, geology and soils, water resources and wetlands, wildlife, fish, public health and safety, and noise) extending over the life of the project.
- 10046-113 **Consistency with State Substantive Standards**
The opening paragraph on page 6-9 in section 6.2 Washington Department of Natural Resources Standards should be appended with the following additional description which sets the proper scope for DNR standards applicable to the Big Eddy-Knight Project:
- “The project area includes state trust lands, State Owned Aquatic Lands managed by DNR and other state and private lands regulated by DNR. Within this scope the Department has multiple responsibilities ranging from the management, disposition and acquisition of certain public trust lands including aquatic lands and natural areas, to regulation of timber harvest activities and fire protection on non-federal lands. The Department collects, analyzes, and distributes scientific data about state plants. The Washington State Geologist is also part of the DNR and maintains and provides information on geologic hazards throughout the state.”
- 10046-114 The department recognizes and appreciates the additional specific references included in this section. Consistency with DNR’s substantive state standards is the umbrella that will largely ensure adequate mitigation for DNR’s concerns. Adherence to DNR’s standards can intercept the potential short and long-term impacts to the natural and human environment. There are several key standards related to DNR’s decisions and management objectives on lands encumbered by BPA projects and lands regulated by the DNR that are not currently included in the Draft EIS. The following should be added as separate sections in Section 6.2:
- **Washington’s Forest Practices Act and Rules**
DNR’s Forest Practices Program is responsible for the implementation of the state’s Forest Practices Act and rules (Chapter 76.09 RCW and Chapter 222 WAC). The rules provide the framework for the protection of public resources on all state and private forest land and are a responsibility of forest landowners, timber owners and operators when conducting forest practices activities.

(For additional information regarding DNR’s role as administrator of the Forest Practices laws, please refer to DNR Substantive State Standards January 19, 2010.)
 - **State Owned Aquatic Lands**
The following conservation measures are implemented on a case by case basis as site specific conditions warrant. As good stewards of the state’s aquatic lands these are the measures that the department currently uses to lessen the impact from development.

10046-112	Comment noted.
10046-113	The suggested paragraph has been added to Section 6.2 of the EIS.
10046-114	Comment noted.
10046-115	The suggested language has been added to Section 6.2 of the EIS.
10046-116	The suggested language has been added to Section 6.2 of the EIS.

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These measures are currently under review in the development of an Aquatic Lands HCP with an incidental take permit that is anticipated for final adoption in about another 18 months. This process somewhat parallels the current timeline for the decision on the Big Eddy-Knight proposal. These measures may change when the Aquatics HCP is finalized and adopted and there may be additional requirements.

1) In saltwater systems, treated wood is only allowed as part of above water structural framing and may not be used as decking, pilings or for any other uses. Treated wood is prohibited for all uses in freshwater. During maintenance, existing treated wood timbers and pilings must be replaced with alternative materials, such as untreated wood, steel, concrete, or recycled plastic, or encased in a manner that prevents leaching of contaminants into surface water. Structural framing in saltwater systems may be replaced with non-cresote treated wood.

2) New bulkheads or hard bank armoring will only be allowed on state-owned aquatic land in exceptional circumstances such as those needed to protect infrastructure. Over time, existing bulkheads must be replaced with softer shoreline protection systems. Bulkheads which cannot be replaced with softer shoreline materials due to design or infrastructure protection issues may be considered for replacement, provided that the bulkhead occupies the same footprint, or smaller, than the existing one.

3) New fill, or additional placement of fill, will not be allowed on state-owned aquatic lands. Fill may be allowed for sediment remediation, authorized habitat creation or restoration projects. Washed gravel or shell may be applied as a substrate amendment for authorized shellfish aquaculture activities.

4) Dredging, including sand and gravel mining, is not allowed on state-owned aquatic lands except where required for navigation for trade and commerce, flood control, or maintenance of water intakes.

5) New activities or structures must avoid existing native aquatic vegetation (Protected Vegetation to be provided by DNR).

6) New outfalls must be located at least 16 feet (5 meters) from existing aquatic vegetation (may change subject to site-specific situations).

7) Species work windows (See Species Work Windows and Buffers provided by DNR) must be used for the timing of any construction, operation or maintenance activities, to protect listed and sensitive species and forage fish species in sensitive life history phases (See Listed and Sensitive Species provided by DNR).

8) Lessees and grantees must remove unused, abandoned structures, treated wood, pilings, derelict vessels, and equipment from the lease or easement site. A timeframe for removal will be specified in the authorizing document.

9) Lessees shall assess water drainage and runoff patterns, and shall develop and implement a plan to alter them to reduce direct inputs of contaminants and nutrients.

(Please see "State Owned Aquatic Lands" on page 15 of these comments for additional information specific to the Big Eddy-Knight Draft EIS.)

10046-116
continued

Comments for correspondence #10046 are continued on the next page.

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10046-117

Appendix I Washington Department of Natural Resources Lands Analysis

Appendix I in its current form is limited to DNR lands managed under its fiduciary Trust responsibilities. Appendix I should be broadened to include lands managed under its responsibilities as a Natural Area Preserve trust land manager.

(By including the DNR's role in managing the Columbia Hills Natural Area Preserve (CHNAP) in Appendix I does not negate the need to present an impartial analysis of the impacts to the CHNAP in the main body of the EIS as is noted in this letter under "Special Lands and Special Status Species".)

10046-118

SEPA/NEPA

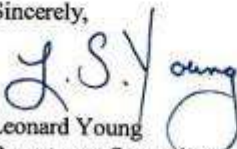
Consideration of "substantive state standards" and a thorough discussion in the NEPA EIS regarding the consideration, avoidance and mitigation of the potential environmental impacts noted in this letter for the Big Eddy-Knight Line Project should facilitate an adequate EIS for SEPA adoption while also meeting NEPA standards.

SEPA requires sufficient information that discloses the significant adverse environmental impacts of the proposal and alternatives, discusses the effectiveness of possible mitigation measures that would significantly mitigate the impacts, and provides for making a reasoned choice between alternatives.

Impact analysis and coordination of SEPA and NEPA requirements are tied to standards set in the State Environmental Policy Act RCW 43.21C and the National Environmental Policy Act.

For additional information regarding SEPA/NEPA coordination and compliance please contact Dave Dietzman at (360) 902-1672.

Sincerely,


Leonard Young
Department Supervisor

LY: dd

cc: Stephen Posner, EFSEC

- 10046-117 Appendix I of the EIS includes an analysis of impacts to the Natural Area Preserve (identified as Parcel 1) within the text, tables, and parcel map.
- 10046-118 Comment noted.

BEKD10047

Carolyn E. Wright

- 10047-001 | Please route the proposed transmission line coming from Goldendale as far to the east as possible, preferably in the Hwy 97 corridor as that would have the least impact on relatively undisturbed lands and the least visual impact to the Columbia River corridor overall. The western-most route shown, which follows the Chenoweth-Goldendale line, is the least desirable due to the impacts the route already has on rare plants and intact plant communities, and the inappropriateness of the route through both a Natural Area Preserve and State Park. A new line would only multiply the negative impacts, which includes
- 10047-002 | habitat destruction, cutting of oaks, spread of invasives and more. This area has tremendous biological values which should not be further degraded. There are also rich botanical values present in the Swale Creek area. I am not familiar with the biological resources present at the other two routes shown, however, both routes appear to cross relatively undisturbed habitats which it is desirable to maintain. The visual impact of both routes coming over the ridgeline is incompatible with the National Scenic Area. Since the
- 10047-003 | eastern-most route shown is not within the Scenic Area it is preferable to the middle route, but a new option further east would be better. Powerlines are ugly to many of us, and ought to be kept within existing areas already impacted. Having the line follow Hwy 14 for a short distance would minimize impacts on otherwise relatively undisturbed land. To
- 10047-004 | the extent that towers can be accessed from existing roads, then fewer miles of new road ways would need to be bladed. Roads fragment habitat and serve as corridors for invasive species to travel. It is best to concentrate new impacts to areas already degraded.

BEKD10048

Elizabeth Stanek

- 10048-001 | I view the Eastern Alternative as the least problematic route for the transmission line and optical cable. It minimizes the scenic and surface impacts on the portion of the Dalles Mountain with maximum scenic and botanical value, and appears on the map to have the least impact on the Gorge Scenic area lands. The Dalles Mountain area is not necessarily well-known outside the local area, but it stands (along with Catherine Creek and Tom McCall Preserves) as one of three intensely varied and valuable botanical areas in the region. It is home to at least two rare and beautiful wildflowers as well as hundreds of acres of dense lupine and balsamroot. The spring bloom in this area is magnificent as are the expansive views in all directions and the area is accessible on minor established roadways, one reason it may be among the most photographed landscapes in the area. This is also a prehistoric and historic area, a trace of the landscape experienced by Lewis and Clark as they came down the Columbia River, and inhabited by Native American cultures long before their arrival. The Eastern Alternative crosses the Dalles Mountain as far as possible (among the proposed alternatives) from the ridge's scenic and botanical core by routing the new power line along the WA Route 14 corridor, an already degraded environment. For these two reasons, I submit my support for this alternative.

- 10047-001 Please see response to comment #10020-002.
- 10047-002 The impacts to land use, vegetation, and wildlife for all alternatives is discussed in Sections 3.1, 3.3, and 3.6 of the EIS. The commentor's preference is noted.
- 10047-003 Please note that the East Alternative also crosses the National Scenic Area, although within an existing transmission line corridor. Also see response to comment #10020-002.
- 10047-004 Thank you for your comments.

- 10048-001 The commentor's preference is noted.

BEKD10049



United States
Department of
Agriculture

Forest
Service

Columbia River Gorge
National Scenic Area

902 Wasco Ave., Suite 200
Hood River, OR 97031
541-308-1700
FAX 541-386-1916

File Code: 1900 – Big Eddy Knight
Date: January 28, 2011

Stacy Mason
Environmental Coordinator
BPA - KEC 4
PO Box 3261
Portland, OR 97208-3621

Dear Ms. Mason:

Please find attached the comments from the Columbia River Gorge National Scenic Area for the Big Eddy-Knight Transmission Line Draft Environmental Impact Statement. If you have further questions please contact Lynn Oliver at 541-308-1716.

Sincerely,

A handwritten signature in blue ink that reads "Daniel T. Harkenrider".

DANIEL T. HARKENRIDER
Area Manager

10049-001



Caring for the Land and Serving People

Printed on Recycled Paper



10049-001 Thank you for your comments.

**USDA Forest Service
Comments on BPA Big Eddy-Knight Transmission Line DEIS**

The USDA Forest Service Columbia River Gorge National Scenic Area (NSA) appreciates the opportunity to comment on Bonneville Power Administration's (BPA's) Draft Environmental Impact Statement (DEIS) for the Big Eddy-Knight Transmission Line Project (Project). These comments are specific to the portion of the project located within the boundaries of the NSA.

Comments specific to National Forest System Land

- 1. The two National Forest System parcels identified in the DEIS may require additional analysis and approval from the Forest Service.**

10049-002

The Forest Service will need to issue a Special Use Permit for any new construction outside of existing right-of-ways, for the Middle and East Alternatives. If the proposed project stays within the existing Right-of-Way of the East Alternative, as granted by the Bureau of Land Management in 1953, no Special Use Permit is required.

Recommendation: The DEIS will need to meet the environmental analysis requirements specific to National Forest System lands.

- 2. The Wildlife Section does not address Forest Service Sensitive Species.**

10049-003

The Regional Forester Sensitive Species should also be included in Section 3.6 as BPA Special Status Species, DEIS, pg. 3-94. The presence or absence of Regional Forester Sensitive Species on Forest Service land, as well as the potential effects of the transmission line and associated facilities on these species, should be evaluated and documented in a biological evaluation or biological assessment.

Recommendation: BPA has indicated that they are preparing a Biological Assessment. The Forest Service recommends including text in Appendix D that identifies the completion of the Biological Assessment. The Forest Service is requesting that a copy of the completed Biological Assessment be forwarded to the NSA for review and concurrence for the portions of the project that cross National Forest System land.

- 3. Insufficient documentation is provided to support the conclusion that sensitive invertebrates are not present on NFS lands within the Project area.**

10049-004

DEIS Appendix D indicates that some invertebrate species listed as Sensitive by the Regional Forester could be present on NFS lands in the Project area. Several streams are present on NFS land where the proposed transmission line will cross, according to maps and the DEIS Wildlife Section 3.6, DEIS, pg. 3-98. Some sensitive invertebrate species may be found on talus slopes and could be present on NFS lands. Insufficient documentation is provided to support the conclusion that sensitive invertebrates are not present on NFS lands.

Recommendation: Provide more documentation concerning the presence or absence of invertebrate species on NFS lands.

- 10049-002 Regarding the East Alternative: in a letter to the USFS (March 1, 2011), BPA indicated that the portion of the project crossing USFS lands is in the SW¼NW¼ and SW¼SW¼, Section 9, Township 2 North, Range 15 East, W.M., Klickitat County, Washington. For background information, BPA received an easement from the Bureau of Land Management (Application #0845, dated March 13, 1953) for a 500-foot wide transmission line corridor for one or more transmission lines and an additional access road which extends beyond the 500-foot right of way width (BPA #M-BE-87-AR17P3).
- All planned work would be completed within areas covered by existing easement rights; therefore, no new Special Use Permit would be required if the East Alternative is selected.
- Regarding the Middle Alternative: If the Middle Alternative is selected, then BPA would apply for a new Special Use Permit for the transmission line and access roads.
- 10049-003 Sections 3.3 and 3.6, and Appendix D of the EIS have been revised to address USFS sensitive species. A Biological Evaluation will be sent to the USFS for review and concurrence as requested.
- 10049-004 Appendix D of the EIS has been updated to provide additional information about invertebrate presence or absence.

Comments Specific to the National Scenic Area

Visual

10049-005	4. The visual simulation methodology The visual simulations that visually display the difference between the existing views and views of the proposed Project are critical to determining the impacts to visual resources. The methodology of the visual simulations must be verifiable and repeatable to ensure the validity of the simulations. Recommendation: Include the visual simulation methodology in the appendices so that verification can be determined and conclusions repeatable by other visual simulation efforts.
10049-006	5. Within the NSA the visual impacts analysis evaluations does not include an effects analysis on the basis of visual dominance or subordination. Within the NSA the project area is within the GMA and the standard required by the management plan is visual subordination. The visual impacts analysis does not measure the degree of compliance or deviation from visual subordination. Recommendation: Within the NSA, the DEIS should fully disclose the impacts to visual resources as measured by the degree of compliance or deviation from visual subordination.
10049-007	6. The visual simulations do not include the access roads or the marker balls that are associated with the proposed Project or disclose the timeframe in which the appearance of the simulation would be achieved. The visual simulations show the towers and the transmission lines, however, they do not show any access roads that would certainly contribute to the impacts to visual quality and possibly effect the achievement of scenic standards. The roads would potentially introduce new forms, lines and colors to the views. The roads may appear quite evident initially and then begin to blend in as restoration efforts such as seeding the cuts and fills take effect. The timeframe in which these simulations are actually expected to be achieved is not disclosed. The simulations of the T-line crossing the river do not show the marker balls or night lighting required for aviation safety. These marker balls would also create a visual impact, drawing the viewer's eye to the lines crossing the expanse of the river.
10049-008	Recommendation: Simulate the roads and marker balls as well as the towers and transmission lines, and then evaluate the impacts to visual quality. Simulations should be "time-sensitive," meaning that simulations should disclose at what length of time the view would appear as simulated such as within a year, within 2-5 years, etc., considering the mitigation measures taken to restore the construction impacts.

- 10049-005 Information about the visual simulation methodology has been added to Appendix C of the EIS.
- 10049-006 Section 3.2 of the EIS has been updated to reflect the degree of compliance or deviation from visual subordination of the transmission line alternatives and options where they cross the National Scenic Area.
- 10049-007 The photo simulations in Section 3.1 of the EIS have been updated with access road location data and marker balls on the span over the Columbia River. The text has been updated to provide the time frame from construction the photos are simulating.
- 10049-008 Please see response to comment #10049-007.

10049-009	7. Additional visual mitigation measures that are not considered in the DEIS. The analysis does not consider the options for tower materials or treatments to minimize contrast and reflectivity. A single dip galvanization process creates a very shiny surface that is unacceptable. A longer dip process renders the surface darker and duller. There are varying methods that may reduce impacts to the visual quality. In addition, standard mitigation techniques such as the use of non-specular conductors and detailed routing options are not discussed in the Project proposal.
10049-010	Recommendation: Add a discussion explaining galvanization techniques that offer differing shades that may mitigate some of the contrast and reflectivity of the towers. Visual simulations should be done to determine the effectiveness of these differing techniques. Non-specular conductors should be specified in the mitigation measures. BPA should design tower locations to minimize visual impacts from key viewing areas.
	<u>Vegetation</u>
10049-011	8. The mitigation statement for vegetation/rare plants requires further clarification. The DEIS states, "Work with the appropriate state agency to mitigate impacts to federal species of concern or state listed species if impacts are unavoidable." DEIS, pg.3-70. There is no hard standard in that statement, and types of mitigation and acceptable levels of mitigation are not specified. Recommendation: Include a further description on the types of possible mitigations. Within the NSA mitigations for Project impacts to rare plants within the GMA are described on pages 1-3-25 to 1-3-29 of the Management Plan (2007).
10049-012	9. The relationship and identification of "priority ecosystem" versus "vegetation type" is confusing. It is not clear in the DEIS what the relationship between "priority ecosystem" and "vegetation type" is (pages 3-58 to 3-60). By way of example, there is no mention of the specific Idaho fescue-houndstongue-hawkweed ecosystem discussed on page S-9. Please explain whether the vegetation types listed after the "Priority Ecosystem" heading are the priority ecosystems or are they just other vegetation types within the Project area. Recommendation: Please clarify the distinction between "vegetation types" and "priority ecosystems."
10049-013	10. The BPA provides no evidence to support its statement that "temporarily disturbed grassland/shrub steppe vegetation communities would likely return within three growing seasons." On page 3-69 of the DEIS, BPA states in the DEIS that: "With reseeding and noxious weed mitigation measures, temporarily disturbed grassland/shrub steppe vegetation communities

- 10049-009 Treating the galvanized steel towers and the transmission line conductors to dull the shininess of the steel has been added as a mitigation measure in Section 3.2 of the EIS to reduce visual impacts. Untreated, the steel would become dull over time, but the process takes 2 to 4 years. BPA does not believe it necessary to develop photo simulations to determine the effectiveness of treated towers, as experience with transmission lines has shown that in all environments, dulled towers are less visible than those with the shiny steel.
- In addition to treating the galvanized steel towers and conductors to lessen visibility, BPA has taken numerous design steps that would mitigate visual impacts of the proposed project within the National Scenic Area, including proposing to consolidate transmission lines to existing transmission line corridors, remove existing lines and place two lines on one set of towers, limit tower heights where feasible to reduce the number of towers that would require FAA lighting, match new tower locations to existing tower sites (or locate towers as close to existing sites as possible), and utilize existing access roads rather than build new access roads where possible. Tower sites within a corridor can be limited by terrain, ability for access, spanning man-made features such as vineyards, and tower heights. BPA sought to set tower sites back from the crossings of the three key viewing areas along the project (I-84, the Columbia River, and SR-14). Towers sites placed relatively close to SR-14 were limited by span and terrain: towers could be raised to accommodate a greater distance from the road edge, but their heights would then require lighting to meet FAA requirements and they would become more visible from a distance. Please also see Section 3.2 of the EIS for a discussion of visual impacts from National Scenic Area key viewing areas along the project.
- 10049-010 Please see response to comment #10049-009.
- 10049-011 Examples of possible measures to mitigate impacts to federal or state species of concern have been added to Section 3.3 of the EIS.
- 10049-012 There are five different priority ecosystems found in the project area. These ecosystems can be found in different vegetation types in the project area. The priority ecosystems title in Section 3.3 of the EIS has been fixed to clarify that the priority ecosystem section stands alone and that the vegetation types listed below it are not a subset of the ecosystems.
- 10049-013 A citation has been added to Section 3.3 of the EIS that references studies that support the statement that disturbed grassland/shrub-steppe or grassland communities could return within three growing seasons with appropriate mitigation.

10049-013 continued	would likely return within three growing seasons". However, there is no documentation to support this conclusion. Recommendation: The FEIS should provide a citation or other supporting documentation for this statement.
	Wildlife
10049-014	11. The peregrine breeding season identified in the DEIS is incorrect. Among the BPA's list of wildlife mitigation measures, it includes avoiding construction activities within 0.25 mile of any active nests during the breeding season for peregrine falcons (March 15 through August 25). Current information from the Washington State Department of Wildlife indicate that the breeding season for the peregrine falcon in this area is February 1- July 15. Bald eagles are not addressed in this section. If bald eagles do not nest in this area, this should also be explained. Recommendation: The FEIS should reflect the correct breeding season for peregrine falcons, which is from February 1- July 15.
10049-015	12. Loss of raptor and migratory habitat On page 3-103, the DEIS states that: "Similarly, loss of habitats would be a greater impact on raptors and migratory birds because of federal protection laws; and the loss of WDFW priority habitats would be a greater impact than the loss of other habitats". Loss of habitat on raptors and migratory birds is not a greater impact because they are protected by federal laws, they are protected by federal law because they are less common species and are vulnerable to the effects of human actions such as power lines. Recommendation: The FEIS should state that the permanent loss of habitats would have a greater impact on raptors and migratory birds than more common species because of the relative rarity of raptors and migratory birds and their known vulnerability to continuing habitat loss and climate change.
	Cultural Resources
10049-016	13. BPA should acknowledgment that Cultural Resource identification efforts are tiered to 36 CFR 800.4(b)(2), and therefore full inventories are not reflected in DEIS. Throughout the document the DEIS does not acknowledge that the cultural resource identification and evaluation efforts are phased and therefore incomplete. This approach confuses the reader in assuming that all cultural resource inventories are completed, and that cultural resource sections in the document accurately reflect true existing conditions. For example, cultural resource inventories were not conducted on NFS lands prior to the publication of the DEIS.

- 10049-014 The mitigation measures in Section 3.6.3 have been revised.
- 10049-015 The sentence referred to has been revised.
- 10049-016 Section 3.8.1 has been revised to clarify that full inventories were not completed for each alternative. As is typically done for large-scale projects such as the proposed project, BPA's approach to identifying cultural resources was done in phases and a 100 percent complete pedestrian survey was not completed prior to the publication of the draft EIS. While there is the possibility that additional sites could be encountered as additional field inventories are conducted, sufficient inventories were conducted prior to the draft EIS to adequately characterize existing conditions concerning cultural resources and the relative effects of each proposed alternative. An additional survey would be used to further confirm the earlier surveys and inventory nearly 100 percent of the project area prior to a record of decision and making a determination of effect pursuant to 36 CFR 800.

10049-016
continued

Recommendation: BPA should clearly state in at Section 4.8, that the DEIS does not fully reflect existing conditions, and that further inventories will be conducted once an alternative is actually selected.

General recommendations to improve the project – Invasive Weeds

The Forest Service highly encourages all appropriate mitigation measures and Best Management Practices to prevent the spread of invasive plants within the NSA. While there are no direct standard and guidelines within the GMA for invasive species, the following comment is submitted to improve this project.

14. Lack of documentation to support the conclusion that the potential for Project construction to spread weeds is "low" and discussion of additional mitigation measures.

10049-017

A construction project of this magnitude spread over such a long distance, where invasive plants are present and could be carried in by construction equipment, will undoubtedly increase the introduction, establishment and spread of invasive plants in the area. While the Forest Service greatly appreciate BPA's efforts to manage weeds along its corridors, weeds are nonetheless very common on these areas and there is little in this document to suggest that chances for increasing weeds in the project area are "low." The DEIS itself seems to suggest that potential for increasing weeds is not low as described on pages 3-64 and 3-67 of the DEIS. The mitigation measures listed in DEIS Section 3.3.3 are also not specific enough to evaluate their effectiveness. There is insufficient information to support moving from high risk to low risk with only the generic mitigation measures listed and no discussion of their effectiveness.

Recommendation: Provide additional information to explain the conclusion that the potential for increasing weeds is low. The analysis should include a discussion of increased introduction, establishment, and spread of invasive plants in the proposed Project area and describe the mitigation measures BPA will implement to mitigate for these Project impacts. The FEIS should include the definition of "invasive plants" as defined by Executive Order 13112 (1999) and that BPA refer to weeds as "invasive plants" except where the specific classification of "noxious weed" is discussed or relevant.

10049-018

The Forest Service recommends only locally sourced and adapted genetically appropriate native plants for revegetation of disturbed areas. The appropriate mitigation and follow-up treatments that it will undertake for invasive plants for several years after construction should be completed. This mitigation includes providing sufficient funding to control weeds for at least three-years post-construction in order to reduce off-site risk and impacts. All of these components could be included in an Integrated Weed Management Plan as a mitigation measure for the project.

End Document

- 10049-017 Although BPA has aggressive noxious weed management procedures in place and has revised the mitigation measures in Section 3.3.3 of the EIS to clarify and reflect those measures, BPA agrees that given the magnitude of the project and the presence of existing weeds in the project area, the risk of the spread of noxious weed is greater than low. Text in Section 3.3.2 has been revised to reflect this. Section 3.3.1 has been revised to include the definition of invasive species as suggested.
- 10049-018 The mitigation measures in Section 3.3.3 of the EIS have been revised to more accurately reflect use of native seed mixtures and describe noxious weed control measures.

BEKD10050

Sarah Russell

The purpose of this letter is to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project and its potential impacts on the Columbia River Gorge.

10050-001 | It is inconceivable that, after the huge amount of dollars and other resources invested in protecting the scenic and natural qualities of this landscape, the Columbia River Gorge, that this transmission project would be considered.

10050-002 | The public input process deserves to be extended and widened. And other alternatives, such as burying the power lines, need to be put forward and the preferred alternative.

10050-003 | Current routing alternatives affect many scenic, cultural and other resources within the Columbia River Gorge National Scenic Area boundary. As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected,

10050-004 | then the transmission lines should be placed underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.

10050-001 Comment noted.

10050-002 Please see the response to comment #10027-002.

10050-003 Please see the response to comment #10027-003.

10050-004 Please see the response to comment #10027-004.



Confederated Tribes and Bands
of the Yakama Nation

BEKD10051

Established by the
Treaty of June 9, 1855

January 28, 2011

Bonneville Power Administration
Public Affairs Office – DKE 7
P.O. Box 14428
Portland, OR 97293-4428

Re: Big Eddy-Knight Transmission Project

Dear Bonneville Power Administration:

10051-001

The Yakama Nation understands that the proposed Big Eddy-Knight Transmission Project concerns real property located within the Yakama Nation's sovereign territory ceded under the Treaty of 1855 and within the Yakama Nation Reservation. The Yakama Nation is requesting formal government-to-government consultation with the Bonneville Power Administration (BPA) regarding this proposed action.

10051-002

In order to honor the Yakama Nation's rights, the BPA has an affirmative trust responsibility to meaningfully consult with the Yakama Nation in all matters affecting the Yakama's treaty-protected rights. The Treaty of 1855 is binding upon federal, state and local governments, including the BPA. The Washington Supreme Court, in *State v. Buchanan*, recognized that "[l]ike any treaty between the United States and another sovereign nation, a treaty with Indians is the supreme law of the land and is binding on the State until Congress limits or abrogates the treaty." In other words, the Yakama Nation's Treaty is binding on the actions of the federal government. Further, recently a federal judge in Washington recognized that when the federal government undertakes any action that might adversely impact the Yakama Nation's rights reserved in the Treaty of 1855, the federal government must consult, on a meaningful level, with the Yakama Nation.

10051-003

Specifically, United States District Court Judge Edward F. Shea recognized – in an August 2010 order intended to prevent any further violation of the Yakama Nation's 1855 Treaty – that the **"Yakama Nation enjoys reserved 'in common' usufructuary rights" over the Yakama Nation's usual and customary areas (including ceded territory)**. In issuing the preliminary injunctive order, Judge Shea found that "there are serious questions about whether [the federal government] adequately consulted with the Yakama Nation as required by the Yakama Treaty of 1855..." It is expected that the BPA will not take further action until meaningful consultation, as requested, has occurred.

Please note that the Bureau of Indian Affairs (BIA) comments submitted to BPA regarding this project in December 2010 are not to be construed as the comments of the Confederated Tribes and Bands of

Post Office Box 151, Fort Road, Toppenish, WA 98948 (509) 865-5121

- 10051-001 As requested, BPA initiated government-to-government consultation with the Confederated Tribes and Bands of the Yakama Nation in February 2011. Previous to this, project leads and technical staff had been working with their Yakama Nation counterparts since May 2009 to identify issues of concern and appropriate mitigation measures. A formal presentation on the proposed project scope, process and schedule was made to the Yakama Tribal Council and staff in November 2009. Coordination between project technical staff at BPA and the Yakama Nation continued throughout the EIS process. Pre-consultation sessions between BPA and the Yakama Nation staff occurred in February and March 2011 in preparation for a formal meeting in June 2011 with Yakama Nation Tribal Council members and BPA senior management and project staff.
- 10051-002 BPA recognizes its trust responsibility with Tribal governments, including the Confederated Tribes and Bands of the Yakama Nation. BPA also recognizes and honors the reserved rights of the Yakama Nation under the Treaty of 1855 and the obligation to meaningfully consult with the Yakama Nation when undertaking any action that might adversely affect the Tribe's rights. BPA's Tribal Policy commits the agency to policy level government-to-government consultation upon request of tribal policy makers and elected officials to better understand the technical and legal issues necessary to make informed decisions.
- As described in response to comment #10051-001, BPA engaged in coordination and consultation with the Yakama Nation at both the technical staff level and leadership level in the EIS process, and will continue to do so as appropriate throughout the life of the project.
- 10051-003 BPA understands that the comments of the Bureau of Indian Affairs (BIA) are independent of, and not a substitute for, those of the Yakama Nation. BPA agrees that coordination and consultation with the Yakama Nation Tribal government is required for this project regardless of any coordination with BIA. Please see the responses to comments #10051-001 and 10051-002.

10051-003 | the Yakama Nation. While the Yakama Nation acknowledges the BIA's trust responsibility regarding
continued | the Yakama Nation, the Yakama Nation's independent tribal government must be consulted, on a
meaningful level, regardless of the comments, concerns, or disposition on any matter issued by the BIA
and related to the rights of the Yakama Nation.

10051-004 | All permits and consultation requirements are pending on BPA's trust responsibility to consult on a
meaningful government-to-government basis with the Yakama Nation Tribal Council.

10051-005 | Thank you for your time and attention. If you have any questions regarding this letter or to arrange the
first government-to-government meeting, please contact Philip Rigdon, Acting Tribal Director at (509)
865-5121 x. 4655.

Sincerely,


Harry Smitskin, Chairman
Yakama Nation Tribal Council

- 10051-004 Comment noted. Please see the responses to comments #10051-001 and 10051-002.
- 10051-005 Thank you for the contact information. BPA was pleased to work with Mr. Rigdon, who was instrumental in arranging government-to-government consultation and pre-consultation preparatory sessions in February, March, and April 2011.

BEKD10052

Sherry and Merlin Smith

- 10052-001 | We would highly encourage you to NOT select the Western Alternative because it would cause the airport in this vicinity to be closed. It also seems that the Middle or Eastern Alternatives provide a much straighter route along a more populated area that already has high power lines where adding more will not be such an eye sore to a residential area where people have invested substantial sums of money for rural atmosphere and unobstructed views. The people in this area have deliberately selected their property and
- 10052-002 | homes for investment, privacy and beautiful unobstructed views. If this power line goes through the Mustang Estates, many people will lose thousands of dollars at a time when property values are already decreasing in value due to economic recession. These investments are what many have made for future living and retirement purposes and should this power line go through here, not only will the property values drop, but selling the homes and land will be extremely difficult if not impossible.
- 10052-003 | Thank you for considering our comments. I know issues like this can be difficult. It is impossible to make everyone happy.
Sincerely, Sherry and Merlin Smith

- 10052-001 Thank you for your comments, your preference has been noted.
- 10052-002 BPA recognizes that wherever the line route is located, it would impact someone's property and views. Please see Section 3.2 and 3.9 for discussions regarding Visual Resources and Socioeconomics.
- 10052-003 Thank you for your comments.

BEKD10053

DATE: January 28, 2011
TO: Bonneville Power Administration
Attn: Stacy Mason, Environmental Coordinator
Steve Prickett, Project Manager
FROM: Charles Pace, Ph.D.
RE: Comments on Big Eddy-Knight Transmission Project

These comments are submitted for Bonneville Power Administration's review and consideration regarding the draft environmental impact statement (DEIS), DOE/EIS-04-0421 for the 500-kilovolt transmission line and substation, i.e., the "Big Eddy-Knight" project, which the agency proposes to construct and operate in Wasco County in Oregon and Klickitat County in Washington, to:

10053-001

- assist the agency make an informed and legally defensible decision on whether or not to go forward with the proposed project, which the DEIS presently does not do;
- identify issues and impacts on resources, which are important to me but, thus far, have not been addressed in the DEIS' analysis of impacts on the natural and socio-economic environment;
- encourage Bonneville to rethink its continuing failure to comply with the requirements of applicable law, including but not limited to the National Environmental Policy Act, the Endangered Species Act, and the Clean Water Act; and
- better align the proposed project with national energy policy, which seeks to create a sustainable (and clean) energy economy by reducing greenhouse gas emissions while safeguarding the health of the environment and fulfilling the social, economic, and other requirements of present and future generations.

10053-002

In my opinion, the most significant weakness in the DEIS is that it does not address, and does not take a hard look at, the environmental and socio-economic impacts of this project and the role it will play in the integration of wind generation within Bonneville's balancing authority or the export of wind power off-system, particularly to California given that state's policies, including renewable portfolio standards and tradable credits.

10053-003

This failure in Bonneville's environmental compliance process leads to alarming inaccuracies and/or misleading and incomplete statements in many parts of the DEIS, including:

- the project Summary;¹

¹ See pages S-1, S-5, S-7, S-9, and S-17.

- 10053-001 Comment noted. BPA believes it has prepared an EIS that complies with applicable NEPA requirements and that will allow for informed decision-making concerning the proposed project. BPA also believes that the EIS provides a reasonably thorough analysis of the proposed project's potential impacts on the environment, and identifies appropriate possible measures to mitigate or avoid those impacts. Furthermore, because many of the requests for firm transmission service that would be served by the proposed transmission line are from existing and proposed wind projects in the area, BPA believes that the proposed project is consistent with the current Administration's renewable energy objectives.
- 10053-002 As discussed in Chapter 1 of the EIS, this transmission line is being proposed in response to requests for transmission service through the project area, with most of these requests from existing or proposed wind development. The additional system capacity provided by the line would allow power to be better moved primary in the project vicinity and throughout the region, but also potentially to other regions that an individual customer may be seeking to reach. Chapter 4 of the EIS addresses the potential cumulative effects of the proposed project in combination with wind projects and other past, present, and reasonably foreseeable future development in the project vicinity.
- 10053-003 Comment noted. Please see response to comment #10053-001.

10053-003
continued

- the statement in Chapter 1 of the DEIS setting forth the purpose and need for the project;²
- the description in Chapter 2 of the DEIS for proposed action and alternatives;³
- the assessment in Chapter 3 of the DEIS regarding the affected environment, environmental impacts and mitigation measures, which must be addressed;⁴
- the analysis of resources and cumulative actions affected in chapter 4 of the DEIS;⁵
- the range of consultation, review and permitting issues identified in Chapter 5 of the DEIS that require (and should trigger) consultation, e.g., with the U.S. Fish and Wildlife Service, NOAA Fisheries, state and local governments, federally-recognized Indian tribes, and other tribal communities or organizations;⁶
- the issues that must be addressed in Chapter 6 of the DEIS to demonstrate consistency with substantive standards promulgated by states given the interplay between federal supremacy, waivers of federal sovereign immunity, and a series of memoranda Bonneville has entered with states to secure the benefits of inter-governmental coordination and cooperation;⁷ and
- the impacts that must be addressed in Chapter 7 of the DEIS to provide consistency with the congressional purposes underlying the creation of the Columbia River Gorge National Scenic Area, as well as the management plan and substantive standards promulgated by the states of Oregon and Washington.⁸

10053-004

Without substantial revision and supplementation, these weaknesses are likely to undermine efforts in the western United States to create a clean energy economy, increase our nation's prosperity, promote energy security, and safeguard the health of our environment. This is contrary to Section 2(f)(iv) of the Executive Order issued on October 5, 2009, by President Obama, which directs all federal agencies, including the United States Department of Energy

² See DEIS, pages 1-2 – 1-3 and 1-7 – 1-8.

³ See DEIS, pages 2-34 and 2-39.

⁴ See DEIS pages 3-3 to 3-5, 3-20, 3-53, 3-104, 3-126 thru 3-128, 3-132, 3-138, 3-144 and 3-174.

⁵ See DEIS, pages 4-3 thru 4-7, 4-9 thru 4-19 and 4-21.

⁶ See DEIS, pages 5-1 thru 5-18.

⁷ See DEIS, pages 6-1 thru 6-21.

⁸ See DEIS, pages 7-1 thru 7-7.

10053-004 Comment noted. Please see response to comment #10053-001. In addition, BPA believes that it is acting consistently with the intent of Executive Order 13514 that is referenced by the commentor, to the extent that the Executive Order is applicable to proposals for federal transmission lines.

10053-004
continued

and Bonneville Power Administration, to ensure that planning for any new federal facilities identify and analyze impacts from energy usage and alternative energy sources in all environmental impact states prepared pursuant to the National Environmental Policy Act of 1969, as amended.⁹

⁹ 42 U.S.C. 4321 *et seq.*

End of responses for previous correspondence.

BEKD10054

FRIENDS OF THE COLUMBIA GORGE

SUBMITTED VIA E-MAIL AND FIRST-CLASS MAIL

January 28, 2011

United States Department of Energy
Bonneville Power Administration
PO Box 3621
Portland OR 97208-9874

Re: Draft Environmental Impact Statement for the Big Eddy-Knight Transmission Project

Dear Responsible Official:

10054-001

Friends of the Columbia Gorge (Friends) has reviewed and would like to comment on the Big Eddy-Knight Transmission Project Draft Environmental Impact Statement (DEIS). Friends is a non-profit organization with approximately 5,000 members dedicated to protecting and enhancing the resources of the Columbia River Gorge. Our membership includes hundreds of citizens who reside within the Columbia River Gorge National Scenic Area. On July 21, 2009 and August 10, 2009 Friends submitted scoping comments on the Big-Eddy Knight Transmission Project. Friends hereby incorporates those comments by reference.

10054-002

The National Environmental Policy Act (NEPA), 42 USC § 4321 *et seq.* requires that the Bonneville Power Administration (BPA) take a hard look at the potential direct, indirect, and cumulative social, economic, physical, and biological effects of the proposed action and reasonable alternatives. The proposed transmission project has the potential to generate significant direct, indirect, and cumulative impacts. These impacts include direct impacts to the scenic resources of the Columbia River Gorge National Scenic Area and shrub-steppe and grassland ecosystems to the impacts from additional wind energy development that would proceed if the Big Eddy-Knight Transmission Project is completed.

Purpose and Need Statement

10054-003

The BPA must first reasonably and objectively define the purpose and need of a proposed action so it can "rigorously explore and objectively evaluate all reasonable alternatives," 40 C.F.R. § 1502.14(a). *See Simmons v. United States Army Corps of Eng'rs*, 120 F.3d 664, 666 (7th Cir. 1997) (citing *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195-96 (D.C. Cir. 1991)). The range of alternatives evaluated in an EIS is dictated by the chosen statement of

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- 10054-001 Comment noted.
- 10054-002 Comment noted. BPA believes it has prepared an EIS that complies with applicable NEPA requirements and properly considers the potential environmental impacts from the proposed project.
- 10054-003 BPA believes that it has properly identified the need for proposed action, as well as the purposes that will be considered in attempting to meet this need. As discussed in Section 1.2 of the EIS, BPA needs to respond to requests for firm transmission service through the project area, and fulfillment of these requests requires additional electrical capacity at this location. It is the need to respond to these requests that is the need to which BPA is responding in proposing this project. While Western states may have certain renewable portfolio standard goals and others who plan to use the proposed line may have their own needs they are seeking to fulfill, none of these are the federal need for action to which BPA is responding with this proposal.

10054-003
continued

purpose and need. *Simmons*, 120 F.3d at 666. There are several important issues that must be considered in shaping a proper purpose and need statement. First, the purpose and need statement must be clearly defined and quantified with sufficient detail to define alternatives. Second, the nature of an agency's statutory mandate dictates the scope of review.

The DEIS explains that the primary driver for the Big Eddy-Knight transmission project are requests for additional transmission capacity to serve proposed wind generation facilities that would be located east of the Cascades. The DEIS explains: "In the past few years, the amount of requested service in this [transmission service request] queue, measured in megawatts (MW), has far exceeded projected load growth (increase in electrical demand) in the Pacific Northwest." DEIS at 1-2. In response to a cumbersome amount of speculative transmission service requests the BPA undertook the Network Open Season (NOS) process to "manage the queue and eliminate speculative requests" and identify where new transmission infrastructure might be necessary to deliver electricity from proposed facilities to markets. DEIS at 1-2. The DEIS explains: "For transmission service requests requiring upgrades, BPA conducted electric powerflow studies of separate 'clusters' of requests to determine where the system was congested and what upgrades were needed to accommodate the most requests." DEIS at 1-2.

The DEIS explains that through the NOS process and related studies the BPA concluded that "there is not enough available capacity to accommodate requests received through the 2008 NOS process to move power from the east side of the Cascade Mountains to load centers on the west side of the Cascades and to major transmission lines serving California." DEIS at 1-3. The BPA concluded that the proposed transmission lines "would allow BPA to accommodate up to 1,150 MW of service requests." DEIS at 1-4.

The BPA goes on: "Through the 2008 NOS process, BPA received about 1,150 MW of requests for transmission service in the project area from multiple customers. BPA has received additional requests for service in this area through the 2009 NOS process. There is insufficient existing available transmission capacity on the 500-kV transmission system to accommodate these requests." DEIS at 1-4. Accommodating these requests without new transmission lines "would likely result in BPA's transmission system becoming overloaded at certain times of the year." DEIS at 1-4.

The ultimate need for new transmission capacity is to ensure that the Washington, Oregon, and California have access to sufficient megawatts of renewable energy to meet their respective Renewable Portfolio Standard (RPS) goals. Absent this driver there would likely not be sufficient demand for additional transmission capacity. The BPA should revise its purpose and need statement to reflect this broader context.

Alternatives Analysis

10054-004

"The purpose of NEPA is to require disclosure of relevant environmental considerations that were given a 'hard look' by the agency, and thereby to permit informed public comment on proposed action and any choices or alternatives that might be pursued with less environmental harm." *Te-Moak Tribe of Western Shoshone of Nevada v. United States Dep't of the Interior*, --- F.3d ---, 2010 WL 2431001 (9th Cir. 2010) (quoting *Lands Council v. Powell*, 395 F.3d 1019,

10054-004 The reason for proposing this transmission line project is not to provide additional sources of renewable energy; rather, as discussed in Chapter 1 of the EIS, this transmission line is being proposed in response to requests for firm transmission service through the project area, regardless of source. Nonetheless, it is true that many of the requests that BPA has received are from existing or proposed wind development in the area, so building a new transmission line to fulfill these service requests would have the incidental benefit of helping wind power from these wind projects reach load centers. However, this benefit should not be confused with the agency's underlying need to which it is responding. Accordingly, BPA believes that the scope of its EIS is appropriate given the need for action and purposes that BPA will attempt to achieve that are identified in the EIS.

10054-004
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1027 (9th Cir.2005)); *see also* 42 U.S.C. § 4332(E) (requiring agencies to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources”). Agencies are required to consider alternatives in an EIS and must give full and meaningful consideration to all reasonable alternatives. *Id.*; *see also* 40 C.F.R. § 1508.9(b). “The existence of a viable but unexamined alternative renders an environmental impact statement inadequate.” *Id.* (citing *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th Cir.1992) (quoting *Citizens for a Better Henderson v. Hodel*, 768 F.2d 1051, 1057 (9th Cir.1985))).

According to the applicable federal regulations, an EIS “shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. CEQ clarified the meaning of this requirement in its “Forty Most Asked Questions” policy guidance by defining “reasonable alternatives” as including “those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.” Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026 (Mar. 23, 1981).

Based on the stated purpose and need, the BPA must undertake additional analysis of the supply and demand for new sources of renewable energy. The demand for wind energy from east of the Cascades has largely been driven by the RPS targets that have been adopted by Washington, Oregon and California. Washington and Oregon utilities are rapidly approaching their RPS targets with currently constructed and permitted facilities. Washington and Oregon utilities may not need the energy generated from facilities that submitted transmission service requests during the 2008, 2009, and 2010 NOS. The BPA must also acknowledge that Washington and Oregon may reach their RPS goals through energy produced in Idaho, Montana, and Wyoming which have yet to be exploited. Notably, those states have over a million MW of wind energy generation potential. *See Estimates of Windy Land Area and Wind Energy Potential by State for Areas >= 30% Capacity Factor at 80m*, National Renewable Energy Laboratory (February 4, 2010). These vast resources may be employed to meet Washington and Oregon’s RPS goals instead of additional generation in the Columbia Plateau region. This alternative source of renewable energy must be factored into the BPA’s NEPA analysis.

10054-005

Recently the California Public Utilities Commission adopted rules that require California utilities to obtain renewable energy credits from generation sources within the State of California. This ruling may dramatically reduce the demand for renewable energy produced in Washington and Oregon and thereby reduce the demand for new transmission capacity. This ruling must be factored into the BPA’s NEPA analysis.

10054-006

The BPA must undertake a detailed review of actual demand for energy, factoring in the RPS requirements of Oregon, Washington, and California, including any limitations such as California’s in-state production standard and opportunities such as energy sources in Idaho, Montana, and Wyoming. The BPA must also address the role conservation and efficiency measures will play in continuing to limit peak load, which will thereby limit the demand for additional generation facilities. If it is unlikely that additional generation would be needed to meet RPS goals, their may not be a need for the proposed transmission facilities.

- 10054-005 Comment noted. BPA is monitoring the consideration of the California Public Utilities Commission (CPUC), along with the California Energy Commission (CEC), of implementation measures for California's RPS program. However, BPA does not expect the CPUC's RPS considerations to have any sort of substantial effect on the requests for firm transmission service that underlie BPA's proposed transmission line. In the speculative case where the CPUC's RPS considerations did ultimately result in a substantial withdrawal of requests for transmission service, BPA decision-makers would consider this information, in addition to environmental information contained in the EIS and other factors, in deciding whether to proceed with the proposed project.
- 10054-006 With the requests for firm transmission service it has in its request queue and because this proposed transmission line is on a key transmission path in the region, BPA believes that there is, and will continue to be, sufficient demand for transmission service to justify the proposed project, regardless of whatever the future demand for energy ultimately turns out to be. In addition, another aspect of this proposed project is that it would increase the reliability of the high-voltage transmission system in the area, which further justifies its development. Concerning conservation and energy efficiency measures, Section 2.6.1 of the EIS addresses these measures and explains why they were considered for the proposed project but eliminated from detailed study in the EIS.

- 10054-007 | In addition to analyzing the above-referenced alternatives, the BPA should review reasonable alternatives that include:
- 10054-008 |
 - An alternative that avoids siting any new transmission lines within the National Scenic Area or its viewshed
- 10054-009 |
 - An alternative that would place underground all or portions of new transmission lines within the Scenic Area viewshed
 - An alternative that studies whether requested transmission services are necessary given The Northwest Power and Conservation Council's Sixth Northwest Conservation and Electric Power Plan, which sets the goal to meet most of new demand through conservation and efficiency. This alternative should also consider whether California markets will create any additional demand for energy from the Pacific Northwest.

Direct and Indirect Impacts Include the Generation Facilities Requesting Transmission Service.

- 10054-010 |

The DEIS explains that the primary driver for the Big Eddy Knight transmission project are requests for additional transmission capacity to serve wind generation facilities. The DEIS explains that through the NOS process and related studies the BPA concluded that "there is not enough available capacity to accommodate requests received through the 2008 NOS process to move power from the east side of the Cascade Mountains to load centers on the west side of the Cascades and to major transmission lines serving California." DEIS at 1-3. The BPA concluded that the proposed transmission lines "would allow BPA to accommodate up to 1,150 MW of service requests."

By the BPA's own description, the primary purpose for constructing the Big Eddy-Knight transmission project is to allow at least 1,150 MW of new generation capacity to be integrated into the grid without harming BPA's ability to provide reliable power and avoid system overloads. Yet the DEIS refuses to take a hard look at the impacts of the energy generation facilities that would proceed if the subject transmission project moves forward.

The DEIS states that the "BPA does not have a region-wide program or plan related to wind or other generation projects, and does not dictate or direct where these projects are proposed." DEIS at 1-8. In fact, the BPA has selected new transmission projects based on a region-wide program, the NOS process, for processing requests for new transmission services. The end-result of the NOS process is a decision on whether to construct new transmission facilities to accommodate clusters of transmission requests. By constructing the proposed transmission lines the BPA tacitly approves where new generation projects are developed and where new generation facilities will likely be proposed in the future.

By the BPA's own description, it appears to select winners and losers in what locations will receive additional capacity. The DEIS states that the NOS process was used to determine where transmission "upgrades were needed to accommodate *the most requests*." DEIS at 1-2 (emphasis added). Rather than determining where upgrades were needed to accommodate the

- 10054-007 Section 2.6.4 of the EIS has been revised to elaborate on a southern routing alternative that would have largely avoided the National Scenic Area (because BPA's existing Big Eddy Substation is located within the National Scenic Area, location of at least a small portion of the proposed line within the National Scenic Area is unavoidable). The route was considered but eliminated from detailed study in the EIS for a number of reasons. The southern route that would avoid the National Scenic Area would not have provided electrical system performance at the level of the proposed alternatives, would have had technical difficulties with two new river crossings and several 500-kV line crossings, and would have require an entirely new transmission line corridor and right-of-way, creating new environmental impacts from towers and new access road construction.
- 10054-008 Section 2.6.3 of the EIS describes the consideration of undergrounding the transmission line. The section has been updated to consider portions of underground line.
- 10054-009 Please see responses to comments #10054-005 and #10054-006.
- 10054-010 To be clear, and as discussed in other responses, BPA is responding to requests for firm transmission service in proposing this project. BPA is not the siting authority for any generation behind these requests for transmission service; that is under the exclusive jurisdiction of local and state siting authorities, as explained in Section 1.7.1 of the EIS. Accordingly, it is these other authorities that will "allow" or approve development of any new generation capacity in the region. While BPA's transmission lines may help facilitate the delivery of wind energy generated on the east of the Cascades, the root cause of wind energy development in this area is the presence of a viable wind resource and decisions made by local and state siting authorities, not BPA. The scope of BPA's proposed action in this case thus is appropriately the transmission line that it proposes to build, and the impact analysis in Chapter 3 of the EIS appropriately focuses on the potential impacts of this proposed line. Nonetheless, BPA also has considered existing and proposed generation associated with the transmission service requests to which the project responds in Chapter 4 of the EIS, to the extent that this generation contributes to potential cumulative impacts in addition to the proposed project.
- Concerning BPA's NOS process, to clarify, NOS was indeed simply a process used to help clear and organize BPA's transmission service request queue, rather than any sort of region-wide program or plan. As explained in Section 1.1 of the EIS, BPA's service request queue was established as a very basic and simple method for those seeking transmission service to fairly easily "jump in line" with their requests. However, towards the end of last decade, the queue had become overburdened with a tremendous volume of requests, many of which BPA suspected were highly uncertain or speculative. The NOS process helped address this issue by requiring resubmittal of requests through a more defined process, thereby helping to eliminate more speculative requests and allowing BPA to then focus on the remaining requests. Accordingly, where BPA focused further study for additional transmission capacity was essentially self-selected by the requests themselves, rather than by BPA. Consistent with NEPA, BPA is preparing NEPA evaluations of each of the proposed transmission line projects that have been proposed as a result of the NOS process.

10054-010
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most requests the BPA could have determined where upgrades were needed to accommodate requests with the least environmental impact.

The explosion in wind energy generation on the east side of the Cascades has in large part occurred because of the existing transmission facilities that serve the federal hydropower system. By fortifying that transmission system the BPA encourages additional development. The DEIS fails to account for the critical role the BPA plays in allowing massive industrial development throughout the Columbia Plateau. Creating additional capacity will likely encourage additional requests for transmission capacity. The BPA must acknowledge feedback loop it is creating by expanding the existing transmission network.

10054-011

The DEIS states that "decisions by BPA on whether to interconnect a particular proposed generation project to its transmission system would be made independently of a decision on whether to construct the proposed Big Eddy-Knight Transmission Project. More specifically, a decision to interconnect any generation project is not dependant on construction of this proposed transmission line." DEIS 1-8. Here the DEIS completely ignores that the construction of generation facilities with a capacity to generate 1,150 MW of energy is completely dependent on the BPA's decision to construct the Big Eddy-Knight transmission line. But for the BPA's action these projects will not go forward. The DEIS arbitrarily draws a line between the generation projects and the necessary transmission facilities. Without the generation facilities the new transmission line would have absolutely no utility. At the least these projects are indirectly related to each other if not directly related. The BPA cannot ignore this obvious relationship to avoid its obligations under NEPA to evaluate direct and indirect impacts.

Notably, during NEPA review of previously approved interconnection requests the BPA has not acknowledged that the transmission requests were leading to an overloading of the BPA transmission system that threatened system reliability and would ultimately lead to the need for additional transmission facilities. Because the BPA has avoided review of these impacts at during project-level review, it cannot also avoid NEPA review when new transmission facilities are proposed. The BPA is essentially playing a shell game whereby the actual impacts of the transmission-generation system are never reviewed under NEPA.

10054-012

The BPA has a complete list of requests for new transmission service requests that have created the need for this project. Based on the locations for these requests the BPA has the information at its disposal that would allow it to consider the impacts of the proposed action. The BPA must revise the DEIS to include some analysis of the developments that are slated to connect to the grid if the Big Eddy-Knight Transmission Project is complete. At the least the BPA should include maps showing the location of generation projects identified through the NOS process. The maps should also show the location of other existing and proposed generation projects in the region.

10054-013

The DEIS hedges its bets by stating "to the extent that the potential environmental impacts of any new or proposed generation projects in the vicinity of the Proposed Action are cumulatively additive to the potential environmental impacts of the Proposed Action, these impacts are discussed and considered in the cumulative impacts analysis in this EIS." DEIS at 1-9. The generation facilities that constitute the "need" for the project cannot be considered

- 10054-011 To clarify, construction of proposed generation associated with the transmission service requests that would be accommodated by the proposed project are not completely dependent on the proposed project. As discussed in response to comment #10054-010, this generation is primarily dependent on receiving approval from local and state authorities that have exclusive jurisdiction over siting these facilities. In addition, some of the requests are from existing wind projects or wind projects already under construction, which demonstrates that the development of these wind projects does not depend wholly on the proposed project. For other requests, it is possible that if the proposed project was not built, the wind projects associated with these requests could nonetheless proceed and interconnect with another transmission system in the area, or even possibly still with BPA's system to the extent that ATC is still available. And even if the wind projects associated with these requests were not developed, the proposed project would clearly still have utility for serving requests from existing wind projects, wind projects already under construction, and simply moving power on BPA's system, as well as helping with general reliability and stability issues for BPA's transmission grid.
- Contrary to the assertions of the commentor, the existing BPA transmission system in the project area is not currently overloaded; rather, it is nearing capacity at certain times under certain conditions which limits its ability to absorb additional MWs. As explained in Section 1.2 of the EIS, the addition of the large number of MWs of requests that BPA has in its queue to this existing system, without system improvements, could cause stability and reliability issues if this service was provided on a firm basis. Accordingly, there were no such issues potentially requiring analysis in previous BPA NEPA documents prepared specifically for individual proposed interconnections of wind projects to BPA's transmission system. Notably, BPA conducts NEPA reviews for all proposed interconnections, and also is conducting a NEPA review for the proposed project. Each of these NEPA reviews also includes an analysis of cumulative impacts. Thus, BPA believes that all potential environmental impacts relevant to its proposed actions are being adequately reviewed and considered under NEPA.
- 10054-012 Existing and proposed generation in the project area that are associated with the transmission service requests to which the project responds are included in the cumulative impact analysis in Chapter 4 of the EIS, which has been updated to more specifically identify those projects and reflect the most current known status of cumulative wind projects in the project vicinity. A map of existing and proposed wind generation projects in the region with existing or proposed interconnections to BPA's transmission system can be found on BPA's website at: <http://transmission.bpa.gov/PlanProj/Wind/> (click on "Current and Proposed Wind Project Interconnection Map").
- 10054-013 BPA believes that it has appropriately considered proposed generation projects in the vicinity that have requested transmission service over the proposed line as cumulative projects in Chapter 4 of the EIS. Please also see responses to comments #10054-010 and #10054-011.

10054-013
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"cumulatively additive." The impacts from energy generation facilities creating the need for the transmission project are at least an indirect impact that must be analyzed through NEPA.¹ In any event, the cumulative impacts analysis in the DEIS is incomplete. Additional critiques of the cumulative effects analysis are included below.

10054-014

The BPA Business Plan Final Environmental Impact Statement (DOE/EIS-0183) (*hereinafter* "Business Plan EIS") evaluated the BPA's broad business plan, including management of its transmission system. The Business Plan EIS included consideration of the impacts of wind projects on scenic resources and noted that scenic impacts are one of the main environmental risks of wind energy development. BPA Business Plan EIS at 4-42, Section 4.3.1. The BPA has previously relied on this environmental review when approving interconnections to the grid. *See* Record of Decision for the Electrical Interconnection of the Windy Point Wind Energy Project November 2006 at 2-3. So the BPA's prior action indicates that it does consider the impacts of wind generation facilities in its broad business planning decisions and when reviewing decisions to approve new interconnections to the grid. How the BPA can now ignore adverse impacts from the wind energy facilities connected to the proposed transmission lines is inexplicable.

Cumulative Impacts analysis

Transmission facilities and related wind energy generation facilities have the potential to decimate populations of wildlife species and transform rural and wild landscapes into industrial landscapes. It is critical that the cumulative, region-wide impacts be evaluated now so that agencies with permitting authority over generation facilities and the public have a full understanding of the impacts of new energy generation and transmission facilities.

10054-015

A cumulative impact is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7. NEPA requires that an EIS assess cumulative impacts in sufficient detail to be "useful to a decision maker in deciding whether, or how, to alter the program to lessen cumulative impacts." *City of Carmel-By-The-Sea v. U.S. Dep't. of Transp.*, 123 F.3d 1142, 1160 (9th Cir. 1997). The cumulative impacts analysis for a proposed project must examine past, present, and proposed/reasonably foreseeable actions in the same area. 40 C.F.R. §§ 1508.7, 1508.25, 1508.27(b)(7); *Tomac v. Norton*, 433 F.3d 852, 864 (D.C. Cir. 2006).

Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7. "To consider cumulative effects, some quantified or detailed information is required. Without such information, neither the courts nor the public, in reviewing [an action agency's] decisions, can be assured that the [agency]

¹ NEPA also requires that the BPA consider the effects of possible future construction that would be made possible if the proposed project moves forward. *See Lange v. Brinegar*, 625 F.2d 812 (9th Cir. 1980); *Swain v. Brinegar*, 542 F.2d 364 (7th Cir. 1976). (Federal Highway administration must consider the effects of possible future highway construction that will be made possible by a proposed highway project, particularly when the proposed segment would have not utility absent related development.)

- 10054-014 Comment noted. There are no wind projects proposed to be interconnected to the proposed Big Eddy-Knight transmission line. As discussed in response to comment #10054-010, this line is being proposed to respond to transmission service requests, not interconnection requests. As discussed in response to comment #10054-012, existing and proposed generation in the project area that are associated with the transmission service requests to which the project responds are included and analyzed in the cumulative impact analysis in Chapter 4 of the EIS.
- 10054-015 Comment noted. BPA believes that the cumulative impact analysis that it has prepared and included in Chapter 4 of the EIS fully complies with NEPA requirements. Furthermore, BPA believes that it has not inappropriately broken down its proposed action into smaller parts to avoid NEPA requirements, nor has it failed to adequately consider “connected actions” within the meaning of NEPA.

10054-015
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provided the hard look that it is required to provide." *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1379 (9th Cir. 1998). The cumulative effects of the proposed action, combined with the cumulative effects of other proposed actions, must be described in detail. *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 810 (9th Cir. 1999). Broad and general statements "devoid of specific, reasoned conclusions" are not sufficient; neither are one-sided cumulative impact statements. *Id.* at 811.

NEPA also prohibits the consideration of the environmental consequences of a project or series of projects in a piecemeal fashion. In the seminal NEPA segmentation case, *Thomas v. Peterson*, the Ninth Circuit held that the failure to consider several related actions in a single EIS "would permit dividing a project into multiple 'actions,' each of which individually has an insignificant environmental impact, but which collectively has a substantial impact." 753 F.2d 754, 758 (1985) (citing *Alpine Lakes Protection Society v. Schlappfer*, 518 F.2d 1089, 1090 (9th Cir. 1975)).

Numerous other NEPA cases follow the teaching of *Thomas v. Peterson* that a project may not be broken down into segments in order to avoid full environmental review at the threshold. In *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998), the court held that a series of timber sales had to be evaluated together because they were all reasonably foreseeable and were sufficiently connected. *Id.* at 1215 & n.6. Significance cannot be avoided by . . . breaking [an action] down into smaller component parts." *Id.* at 1215. See also *Environmental Defense Fund v. Marsh*, 651 F.2d 983 (5th Cir. 1981) (a court may prohibit segmentation or require a comprehensive EIS for two projects, even when one is not yet proposed, if the decision-making agency has arbitrarily violated the underlying purpose of NEPA to review the environmental impacts of projects at the threshold stage); *People of Enemetak v. Laird*, 353 F. Supp. 811, 821 (D. Haw. 1973) ("almost every project can be divided into smaller parts, some of which might not have any appreciable effect on the environment.")

10054-016

During the project-specific review of wind energy facility proposals throughout the Columbia Plateau the Washington Department of Fish and Wildlife (WDFW), the Oregon Department of Fish and Wildlife (ODFW), and the U.S. Fish and Wildlife Service (USFWS) have called for analysis of cumulative impacts avian and bat species, with emphasis on the need to evaluate impact to migratory bird corridors.

10054-017

To date no agency has conducted environmental review of extensive industrial-scale energy development throughout the region. The BPA is already integrating thousands of megawatts of wind energy into the grid. The Big Eddy-Knight project would pave the way for over 1,150 MW of new wind energy generation. The DEIS does not identify how many megawatts of addition generation would be accommodated if other transmission projects are completed, including the I-5 Corridor Enhancement, the McNary-John Day Transmission Project, and others. The DEIS concludes that no analysis of these cumulative impacts is necessary.

The DEIS states that "BPA does not have a region-wide program or plan to take actions related to its transmission system. These actions [the various transmission projects] are proposed on a project-specific basis, when needed, to address various transmission reliability and service

- 10054-016 Comment noted. BPA would be supportive of any efforts by these agencies to work with wind project developers on a more regional impact analysis as suggested by the commentor.
- 10054-017 As discussed in response to comment #10054-010, the NOS process did not constitute a regional program or plan, but was rather a mechanism for clearing and organizing BPA's transmission service request queue. Many of the firm transmission service requests that would be served by the various independent transmission projects proposed by BPA throughout the Pacific Northwest were already in the queue well before the NOS process was conducted. Thus, while the demand for each individual transmission project was clarified as a result of the NOS process, the NOS process itself did not establish this demand. As discussed in Section 1.7.2 of the EIS, each of the transmission projects proposed by BPA throughout the Pacific Northwest are "stand-alone" projects. Furthermore, the more major proposed transmission projects – Big Eddy-Knight, Central Ferry-Lower Monumental, and I-5 Corridor Reinforcement – are each undergoing a full EIS review under NEPA. Given the geographic separation of each of these proposed transmission projects, BPA believes it has adequately scoped its cumulative impact analysis in the EIS for the proposed Big Eddy-Knight Project.

10054-017
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issues on certain portions of BPA's transmission system. In addition, increases in capacity that may occur on BPA's existing transmission system from proposed infrastructure improvements would be in response to already existing requests for transmission service, rather than designed to provide significant additional, unsubscribed capacity." DEIS at 1-9. The DEIS recognizes some "synergies" between the various transmission line projects, but argues that the proposed projects are not "dependant on any other project for its viability or success." DEIS at 1-9.

First, the DEIS acknowledged the transmission line projects were identified through the NOS process. This is a region-wide program for identifying where new transmission request are located and how to provide service to those locations. The BPA's statement that it does not have a region-wide program related to the transmission system is simply false. Even if other transmission projects and the generation facilities are fully independent from the Big Eddy-Knight project, those projects must be analyzed for the potential cumulative impacts that would occur in conjunction with the Big Eddy-Knight project. These reasonably foreseeable development proposals are clearly likely to contribute to additional energy development in the region and contribute to impacts to the same resources that are affected by the Big Eddy-Knight proposal. As such, the BPA must analyze the cumulative impacts of these proposals.

10054-018

The cumulative effects analysis in the DEIS is limited to review of generation projects in the "vicinity" of the Big Eddy-Knight Transmission Project. The DEIS states that "the project would add to the on-going development of utility-related land uses in the *project vicinity*. The proposed project thus would contribute incrementally, though in a relatively minor way, to potential cumulative land use impacts in the area." DEIS at 4-11 (emphasis added). It is inappropriate for the DEIS to limit its cumulative effects analysis to impacts in the "project vicinity" when it is clear that BPA's NOS process and other transmission proposals are increasing the impacts of utility-related land uses across the region.

Big Eddy-Knight Transmission project is but one major transmission project in the region and would individually lead directly to the development of 1,150 MW of new generation facilities. Other projects will likely increase the transmission capacity even more, thereby allowing more generation facilities in a region being rapidly industrialized. The BPA cannot ignore the massive transformation of the landscape that is occurring because of the overall increase in energy transmission capacity.

10054-019

The DEIS states that the project would incrementally add to the cumulative impacts of other developments in the project vicinity. DEIS at 4-15. The DEIS acknowledges that transmission facilities and wind energy facilities pose a threat to bird species. DEIS at 4-16. The DEIS cites a West, Inc. study (West Study) that was commissioned by Klickitat County to estimate bird fatalities in the Columbia Plateau due to wind energy development. DEIS at 4-16; *citing Avian and Bat Cumulative Impacts Associated with Wind Energy Development in the Columbia Plateau Ecoregion of Eastern Washington and Oregon*, West Inc. (February 2010). Reliance on the West Study is unacceptable because the analysis was based on flawed methodologies and only considered a fraction of the total utility-related development that has impacts to birds.

- 10054-018 Comment noted. Please see responses to comments #10054-010 through #10054-017.
- 10054-019 BPA believes that the West Study is a reasonable approach for determining cumulative impacts to birds from electrical utility infrastructure. Transmission lines account for small numbers of bird deaths regionally. However, Chapter 4 has been revised to acknowledge the potential that cumulative effects could be greater than described in the study.

10054-020 The preeminent scientist on the impacts of wind energy development on birds reviewed the West Study and concluded that the study underestimated likely fatality rates by employing flawed methodologies. *See Review of Cumulative Impacts Analysis of Wind Energy Expansion on the Columbia Plateau*, K. Shawn Smallwood (May 18, 2010); *see also* Curriculum Vitae, K. Shawn Smallwood. In addition, the West Study was based on 12 projects and does not include analysis of recently reported fatality rates that show significantly higher fatality rates for specific projects. Thus, even if the BPA were to rely on West's flawed methodologies, the cumulative effects estimates would likely increase if currently available data were considered.

10054-021 The West Study does not appear to have considered the additional development that would proceed if the Big Eddy-Knight Transmission Project and other transmission projects are constructed. West Study at 3–4. The BPA essentially reviewed the cumulative impacts of past development when NEPA requires analysis of past, present, and likely future development. The BPA must review the likely cumulative effects of all new transmission facilities and all new wind energy development that would connect to those transmission facilities.

10054-022 The BPA has failed to undertake comprehensive review of the impacts of its transmission system. The BPA's last comprehensive review of the transmission system was in 1995. BPA Business Plan Final Environmental Impact Statement (DOE/EIS-0183) (*hereinafter* "BPA BP EIS"). That review noted that wind energy could cause adverse impacts to wildlife and scenic resources, but did not undertake any detailed review of how providing access to the transmission system would lead to impacts from the explosion of wind energy development throughout the region. BPA BP EIS at 4-42, Section 4.3.1. The BPA BP EIS also does not address how much wind energy can be integrated into the grid and how new transmission facilities would be needed to accommodate new transmission requests.

10054-023 In 2007, the BPA undertook a supplemental analysis of the Business Plan EIS, but declined to undertake further NEPA review. Supplemental Analysis of the Business Plan EIS (DOE/EIS-0183) (April 6, 2007). The supplement stated that "continued consideration of a comprehensive policy for BPA's transmission business is not in the best interests of the agency at this time." The supplemental analysis was based on four wind projects totaling 750 MW of wind energy that had been connected to the BPA grid at that time. *Id.* at 42. The analysis did not discuss impacts to wildlife from this development. *Id.* at 46. The analysis did not include a section on scenic impacts, much less how wind energy development enabled by the BPA has transformed scenic landscapes. The supplemental review also failed to acknowledge the ongoing impacts to cultural resources from the development that has been enabled by the BPA transmission system. *Id.* at 48–49.

Since the BPA's last review of the environmental impacts associated with the transmission system and the energy production that system allows, an unprecedented level of new wind energy development was occurring throughout the region. Over 3,000 MW of wind energy has been interconnected to the grid. The BPA has signed PTSAs for as much as 12,000 additional MW of new generating capacity. The Big Eddy-Knight Transmission Project alone would allow 1,150 MW of new generation to interconnect to the grid.

- 10054-020 Please see response to comment #10054-019.
- 10054-021 Please see responses to comments # 10054-10 and 10054-11 concerning the relationship between wind development in the area and the proposed project. Regarding the West Study, on page 3-4, the study indicates that it considered an estimated 6,700 MW of wind energy development in the Columbia Plateau Ecoregion with a projection of 5,577 MW of wind energy development by the year 2013. While there is the potential for even more wind energy development to ultimately occur in the Columbia Plateau as shown in Tables 4-2 through 4-4 of the EIS, the estimates in the West Study were reasonable at the time the study was done, and incorporation of this study's results in the EIS provides a reasonable estimate of the cumulative impact on bird species from past, present, and likely future wind development. As discussed in response to comment #10054-019, it is acknowledged that potential cumulative effects from this wind development could be greater than described in the West Study.
- 10054-022 The commentor's views concerning BPA's Business Plan EIS and a regional review of BPA's transmission system are noted. BPA does not believe that there is any requirement that it conduct a regional review of its transmission system. Furthermore, BPA believes it is reasonable to consider transmission needs on a location-specific basis, given the transmission path-specific nature of firm transmission service requests. BPA is committed to ensuring thorough NEPA evaluation of any proposed transmission projects arising from such considerations.
- 10054-023 The commentor's observations concerning BPA's 2007 Supplement Analysis (SA) to the Business Plan EIS are noted. However, the commenter appears to misunderstand the purpose of this SA. As discussed in the SA, the SA was prepared to determine whether there have been any changes in BPA's business practices or in environmental conditions since publication of the Business Plan EIS that could trigger the need for a supplemental or new EIS. The SA was not intended to provide for environmental review of wind projects that had been interconnected to BPA's transmission system since the Business Plan EIS; such review was accomplished through NEPA documentation prepared for each project. Furthermore, the SA was not "based" on four wind projects, as stated by the commentor; instead, these four projects are merely identified as examples of changes in the affected environment since publication of the Business Plan EIS. BPA believes it has adequately evaluated wind projects under NEPA as they have been proposed for interconnection to BPA's transmission system.

10054-024

The impacts of this development have dramatically changed landscapes throughout thousands of acres of rural Washington and Oregon along with countless scenic vistas. This development is also killing or displacing an unknown number of birds and ongoing damage to cultural resources is occurring from the excessive ground disturbance and road building. These impacts must be addressed through the NEPA process. If the BPA determines that such review for the Big Eddy-Knight Transmission Project, then it must supplement its Business Plan EIS with a region-wide analysis.

The DEIS Fails to Adequately Analyze Scenic Impacts

The scenic impacts analysis in the DEIS appears to have upon the Federal Highway Administration's manual *Visual Impacts Assessments for Highway Projects*, FHWA Publication No. FHWA-H-88-054. DEIS at Appendix C. Notably, the FHWA manual was designed specifically for reviewing scenic impacts of highway projects. While there is limited flexibility to apply the project to other types of development, there are far more appropriate scenic resource assessment methodologies that should be used for transmission line projects, particularly for a project proposed within the Columbia River Gorge National Scenic Area.

10054-025

The USDA Forest Service, as the primary federal agency with jurisdiction and expertise with scenic resources in the National Scenic Area, has well-established practices for evaluating scenic impacts under NEPA. The Forest Service has stated its practice for NEPA as: "The measurement for the effect to scenic resources is the degree to which the project activities are predicted to meet Management Plan scenic resource guidelines in the required timeframes from Key Viewing Areas." See Burdoin Mountain, Coyote Wall, Catherine Creek Recreation Plan Environmental Assessment (June 2010) at 49; see also Cape Horn Trail Area Recreation Plan Environmental Assessment (October 2009) at III-3. Since the proposed action will affect the scenic resources of the National Scenic Area the BPA should employ the same measurement used by the Forest Service. A more detailed description of applicable Scenic Area standards are included below.

If the BPA chooses not to follow the Forest Service's example, it should at least use information from prior Forest Service scenic resource inventories. In preparing the Management Plan for the National Scenic Area, the Gorge Commission and the Forest Service were required to inventory scenic resources of the National Scenic Area. See 16 USC 544d.(a)(1)(A). Pursuant to that mandate the Forest Service and Gorge Commission completed a scenic resource inventory using the Forest Service's Visual Management System ("VMS"), which is the scenic resource management methodology provided in the Forest Service's "National Forests Landscape Management Vol. 2" (Agriculture Handbook 462).²

All viewsheds visible from primary key viewing areas were inventoried. These inventories served as the basis for all scenic resource management policies and guidelines in the CRGNSA Management Plan. The original scenic resource inventory includes the following

² The Visual Management System has since been superseded by a revised methodology, the Scenery Management System ("SMS"). The methodology for the SMS is described in "Landscape Aesthetics: A Handbook for Scenery Management." (Agriculture Handbook 701).

- 10054-024 Comment noted. Please see responses to comments #10054-010 through #10054-013 and #10054-022.
- 10054-025 Please see Appendix C of the EIS for a description of the visual analysis methodology used to help determine the visual impacts for the proposed project. Using guidance from the Federal Highway Administration methodology is appropriate for determining visual impacts of transmission lines, since both roadways and transmission lines are linear projects that pass by many different types of natural landforms, human made elements, and viewers. As discussed in Chapter 7 of the EIS, BPA is coordinating with the USFS National Scenic Area Office concerning consistency of the proposed project with the Management Plan for the Columbia River Gorge National Scenic Area (Management Plan). Issues being addressed include the proposed project's potential scenic impacts. The Management Plan is derived from the National Scenic Area Act and provides provisions for the protection and enhancement of scenic, natural, cultural, and recreation resources. The Management Plan contains specific scenic resource protection provisions, including goals, objectives, policies, and guidelines. Implementation of these provisions with resource inventories, key viewing area information, landscape settings, and special protections for scenic travel corridors is the methodology for resource protection in the National Scenic Area. All new proposed development in the General Management Area (GMA) is required to meet the visual quality objective of Visually Subordinate¹ to the maximum extent practicable pursuant to the guidelines for the protection of scenic resources on sites visible from key viewing areas (Management Plan, I-1-5 through I-1-35) and overall scenic provision policies and guidelines (Management Plan, I-1-3). To meet this standard, the guidelines may affect the siting, location, size, and other design features of proposed development.
- The commentor suggests that BPA consider using the same visual resource methodology used by the USFS in developing recreation plans for other parts of the National Scenic Area. However, in addition to having completely different types of projects from the proposed transmission line, the areas included in these recreation plans were within the Special Management Area (SMA), with its very specific management directives, while the proposed project is in the GMA.
- The commentor has stated that BPA should use prior USFS scenic resources inventories and identifies the inventories completed in the development of the Management Plan. The USFS provided a variety of scenic resource information to BPA at the beginning of the project. BPA used this information while developing the visual impact analysis.
- BPA will continue to work with the USFS, both through the EIS process and the USFS's consistency review process, to provide relevant project information concerning consistency with resource protection provisions contained within the Management Plan. The USFS will determine whether the proposed project is consistent, whether any modifications are required and any necessary mitigation measures to ensure consistency.

¹ Visually Subordinate: A description of the relative visibility of a structure or use where that structure or use does not noticeable contrast with the surrounding landscape, as viewed from a specified vantage point (generally a key viewing area, for the Management Plan). As opposed to structures that are fully screened, structures that are visually subordinate may be partially visible. They are not visually dominant in relation to their surroundings. Visually subordinate forest practices in the SMA shall repeat form, line, color, or texture common to the natural landscape, while changes in their qualities of size, amount, intensity, direction, pattern, etc., shall not dominate the natural landscape setting. (Management Plan Glossary – 21).

10054-025
continued

elements: Visual Attributes, Landscape Diversity, Landscape Significance, Seen Areas from Key Viewing Areas, Visual Absorption Capability, and Landscape Sensitivity. The 1991 CRGNSA Management Plan described the inventories:

Six maps were developed in the process of inventorying scenic resources. These maps are based on the Forest Service Visual Management System. They have been used to develop policies and guidelines that respond to the various levels of visual significance and sensitivity within the Gorge, and that highlight protection of landscapes seen by large numbers of people.

The first inventory map created, "Visual Attributes," identifies 12 predominant landscape types found in the Gorge, ranging from rural townscapes to cliffs.

The "Landscape Diversity" map gauges the variety of visual features in the landscape. A basic premise of the visual management system is that visual diversity is a key element of those landscapes people find most visually appealing and interesting. Much of the Gorge, with its steep landforms, forested slopes, waterfalls, pastoral areas, and rural townscapes, has outstanding visual diversity.

A "Seen Areas" map shows which areas are visible from key viewing areas. The key viewing areas are important public vantage points from which Gorge landscapes are viewed. Scenic protection of lands seen from these vantage points has been emphasized since the inception of the Scenic Area planning process. The Management Plan continues this direction.

The "Landscape Significance" map combines the "Seen Areas" and "Landscape Diversity" maps, based on the concept that the most significant landscapes are those that are both visually diverse and seen from important viewpoints. The "Visual Absorption Capability" map displays the relative ability of different Gorge landscapes to absorb change (through new development) without diminishing their scenic qualities. It is based primarily on the degree of slope and amount of vegetative cover.

"Landscape Sensitivity," the last of the six inventory maps, combines "Landscape Significance" with "Visual Absorption Capability," based on the assumption that the most visually sensitive lands are those that are both highly significant and most vulnerable to visual impacts from new development.

CRGNSA Management Plan 1991, at I-1—2. If Management Plan standards are not used to assess visual impacts, the BPA must review whether the scenic assessment is consistent with the visual resource assessment completed pursuant to the Scenic Area Act.

10054-026

If the BPA chooses to ignore the Forest Service's past practices for NEPA, it should use the Forest Service's scenic resource management methodology instead of the FHWA manual. The Forest Service's Scenery Management System ("SMS"), "Landscape Aesthetics: A Handbook for Scenery Management." (Agriculture Handbook 701), is the best available science for evaluating scenic resources. The SMS is the more current and complete methodology. The

10054-026 The commentor states that BPA should use the USFS Scenery Management System if it does not follow past USFS NEPA practices. There are a number of different visual resource methodologies available, and each one may be appropriate depending on the nature, location and scale of the project to evaluate direct, indirect, and cumulative effects. The Management Plan for the Columbia River Gorge National Scenic Area contains provisions for the protection of scenic resources in the National Scenic Area and would be used by the USFS to evaluate all potential resource impacts (Management Plan Part I Chapter 1). The proposed project is located on federal easements crossing public and private lands in the GMA of the National Scenic Area. Given this information, the development is not subject to the provisions for the SMA or requirements for USFS lands. Instead, the project will be subject to the direction provided for the GMA in the Management Plan. Also see response to comment #10054-025.

10054-026
continued

SMS includes a supplemental handbook for utility projects. Cite. Given the Big Eddy-Knight Transmission Project affect scenic resources inventoried and protected by the Forest Service, it is inappropriate to use the FHWA's manual.

10054-027

Finally, the DEIS fails to implement elements of the FHWA manual. For example, the FHWA manual identifies middle ground views, up to 5 miles, as potentially highly sensitive to alterations in the landscape. The DEIS focuses on potentially significant impacts to foreground views and fails to adequately analyze impacts to middle-ground views. For example, the DEIS states that the transmission towers would appear "most visible where the towers cross the skyline or are in viewers' foreground. . ." but is silent on impacts to middle-ground views. DEIS at S-7. The proposed development would also be highly visible in middle-ground views causing significant adverse impacts.

The DEIS appears to diverge from the BPA's analyses of scenic impacts for other transmission projects in the region. The BPA's Draft EIS for the Central Ferry-Lower Monumental 500-kilovolt Transmission Line Project concluded that construction of a 200-foot-tall transmission line within vistas seen from the Lewis and Clark National Scenic Trail and the Lewis and Clark Scenic Byway would have "high" impacts to scenic resources. Central Ferry-Lower Monumental 500-kilovolt Transmission Line Project DEIS (July 2010) Section 3.7, p 3-91 to 3-104 (hereinafter Central Ferry DEIS).

10054-028

The Central Ferry DEIS described the affected landscape as "Typical view[s] of rolling hills and rural landscape adjacent to scenic by way." Table 3-22. The analysis explained that the transmission line would be 1.6 miles (middleground view) from the Lewis and Clark National Historic Trail at its closest point. Central Ferry DEIS at 3-98. The analysis also acknowledged that the transmission lines would create a skyline effect and break up the continuity of the skyline and open terrain, and that the project would introduce structures into a natural landscape. Central Ferry DEIS at 3-98. "The proposed towers and conductors would be a conspicuous change to the relatively natural and rural landscape and would disrupt the continuity of visual resources in the landscape." Central Ferry DEIS at 3-98. The project would be visible from "popular recreation areas and a frequently traveled roadway." Central Ferry DEIS at 3-98.

The adverse impacts transmission lines were also acknowledged in the BPA's Business Plan EIS. The Business Plan EIS stated:

In areas used for recreation, particularly in undeveloped places, studies show that many users find transmission lines to be an unwelcome visual intrusion. Also, many citizens feel strongly that transmission lines near their homes are visually intrusive, and that some property values may be reduced. Adverse visual effects may be perceived up to several kilometers from the line. Transmission lines may be more compatible with industrial areas. The effectiveness of potential mitigation measures depends on the site, and some measures may substantially increase the cost of the project. Possible measures include darkened towers in forested areas; different tower designs more compatible with a particular environment; non-specular (nonshiny) conductor; and locations that avoid visually sensitive areas.

- 10054-027 The analysis in Section 3.1 of the EIS has been updated to reflect impacts of the proposed project to middle ground views.
- 10054-028 BPA is consistent in its analysis of visual impacts across various projects and recognizes the difficulty comparing visual impact ratings from one EIS to another because of the many site-specific issues that are taken into account (including but not limited to visual quality, existing structures, viewer sensitivity, and terrain). Section 3.2 of the EIS acknowledges potential impacts of the route alternatives in the fore, middle and background views of the locations crossed by the routes. In locations where the Central Ferry EIS has stated that visual impacts would be high, there are no existing transmission lines in the viewshed and the proposed line would create a new visual element in a highly regarded scenic area. The Big Eddy-Knight EIS also considers visual impacts to be high in areas where there are sensitive viewers and no existing lattice-steel-tower transmission lines as reflected in the West Alternative's high impact rating. Through the National Scenic Area, the Middle Alternative follows an existing transmission line corridor for the first 9 miles, before turning and creating new corridor and a new visual intrusion. Overall impacts of the Middle Alternative are considered moderate-to-high, reflecting that the impacts are different from the visual impacts of the West Alternative, and that viewpoints and situations along the route are also different. BPA has revised the overall visual impact rating of the East Alternative to moderate-to-high, but acknowledges that it would have a lesser impact than the Middle Alternative through the NSA.

10054-028
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BPA BP EIS at 4-52, Section 4.3.2.6.

By failing to apply established practices and the best available science, and erroneously employing inappropriate methodologies, the conclusions in the DEIS are inaccurate and understated. See DEIS at S-8. While the DEIS concludes that the West Alternative would likely have "High" impacts, it would likely lead to "High" to "Very High" impacts. The DEIS concludes that the Middle Alternative would have "moderate to high" impacts when it would likely have high impacts. Finally, the DEIS concludes that the East Alternative would have "low-to-moderate" impacts even though it would cross foreground views thereby causing moderate to high impacts. Based on the available information, impacts from the Middle and Eastern Alternative would likely be high as well.

10054-029

Management Plan for the Columbia River Gorge National Scenic Area

The BPA must ensure that its effects analysis considers all legal and regulatory requirements. This must include a discussion of relevant provisions of the Management Plan for the Columbia River Gorge National Scenic Area. The National Scenic Area was established by Congress to protect the scenic, natural, cultural, and recreational values of the Columbia River Gorge. All federally licensed land use activities within the Scenic Area must be reviewed for consistency with the Scenic Area Act, 16 U.S.C. § 514(d). The applicant must submit a complete application to the Forest Service for scenic area review and approval. The project would cross several land use designations, potentially including Large-Scale Agriculture, Agricultural-Special, Open Space, and Residential zones.

10054-030

The Western Alternative would pass through a GMA Agricultural Special land use designation. The DEIS correctly notes that maintenance and replacement of existing utility facilities is an allowed use, but that new utility facilities are prohibited. The DEIS notes that the BPA is awaiting a legal opinion from the Forest Service on whether the project would be allowed in the Agriculture-Special zone. Friends notes that constructing 200-foot-tall, steel lattice tower, 500 kV transmission lines within an right-of-way currently used by small, traditional wood-post power lines would constitute a new use. The Management Plan allows the BPA to maintain and replace that use, but it cannot construct new 500 kV transmission lines.

The Management Plan defines maintenance as:

Ordinary upkeep or preservation of a serviceable structure affected by wear or natural elements. *Maintenance does not change the original size, scope, configuration or design of a structure.*

Maintenance includes, but is not limited to, painting and refinishing, regrouting masonry, patching roofs, grading gravel roads and road shoulders, cleaning and armoring ditches and culverts, filling potholes, controlling vegetation within rights-of-way, removing trees and other roadside hazards within rights-of-way, and testing and treating utility poles.

- 10054-029 Comment noted. Chapter 5 of the EIS identifies and considers legal and regulatory requirements potentially applicable to the proposed project. This chapter includes a discussion of the Columbia River Gorge National Scenic Area Act and its associated Management Plan (see Section 5.23). In addition, potentially applicable provisions and land use designations of the Management Plan are specifically addressed in Chapter 7 of the EIS. Both Chapters 5 and 7 of the EIS acknowledge federal project consistency review requirements under the Scenic Area Act.
- 10054-030 To clarify, and as discussed in Section 7.2 of the EIS, BPA is working with the USFS to further assess project consistency aspects for the portion of the West Alternative that would cross the designated Agriculture Special area, rather than seeking a “legal opinion” from the USFS as suggested by the commentor. The commentor’s interpretation of the word “replacement” under the Management Plan and views concerning what constitutes a new use are noted.

10054-030
continued

Management Plan Glossary at 12 (emphasis added). The Management Plan does not define replacement, but replacement is included as a subset of repair, which is defined as:

Replacement or reconstruction of a part of a serviceable structure after damage, decay or wear. A repair returns a structure to its original and previously authorized and undamaged condition. It does not change the original size, scope, configuration or design of a structure, nor does it excavate beyond the depth of the original structure.

Repair includes, but is not limited to, reroofing a building, replacing damaged guardrails, reconstructing a rotten deck or porch, replacing a broken window or door, replacing a utility pole and associated anchors, replacing a section of broken water or sewer line, replacing a damaged or defective utility line, reconstructing a portion of a building damaged by fire or a natural event, and replacing railroad ties or rails.

Management Plan Glossary at 16. Under these regulations the Western Alternative is a prohibited use.

10054-031

The Middle and Eastern Alternatives would primarily be located in land designated Large-Scale Agriculture, where utility facilities necessary for public service are allowed subject to compliance with all scenic, cultural, natural, and recreation resource guidelines. The BPA must also show that there is no practicable alternative location with less adverse impacts on agricultural lands and the size is the minimum necessary for the service. Management Plan at II-1-12.

10054-032

Amongst other standards in the Management Plan, a critical requirement is that new utility transmission lines be visually subordinate as seen from key viewing areas to the maximum extent practicable. Management Plan at I-1-6. Practicable is defined by the Management Plan as "Able to be done, considering technology and cost." Management Plan at Glossary 14. Thus, to site any new transmission line within the National Scenic Area the BPA must demonstrate that the project would be visually subordinate or that it is not otherwise possible for the project to be completed. It is highly likely that the BPA will not be able to achieve visual subordination with the proposed alternatives. This underscores the need for extensive alternatives analysis that includes variation that avoid impacts to the Scenic Area.

10054-033

The Management Plan also includes standards for siting and designing projects to achieve the visual subordination standard. These include requirements that projects be sited to use existing topography to screen development from views from KVAs and design roads to limit the visibility of cut-banks and fill-slopes. The standards also require that exterior materials be dark, earth-tone colors. To comply with these standards the BPA should site individual transmission towers behind landforms where feasible are site roads to avoid cut-banks. The BPA should also use weathering steel that the tower will contrast less with the natural landscape.

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- 10054-031 Comment noted. Review requirements for portions of the proposed project that would cross designated Large Scale Agricultural areas are shown in Table 7-2 of the EIS and discussed in Section 7.2 of the EIS. This discussion has been revised to clarify the distinction under the Management Plan between new utility uses and replacement of existing utility uses, and to reference coordination with the USFS and consideration of the BPA-specific exemption in the Scenic Area Act.
- 10054-032 BPA has worked to make the proposed alternatives visually subordinate from the applicable key areas (I-84, SR-14, Columbia River, and Rowena Plateau) to the maximum extent possible as required in the Management Plan. Please see Sections 3.2, 7.3 and Appendix C of the EIS for a description of the visual impacts from the National Scenic Area's key viewing areas.
- 10054-033 Comment noted. Additional information concerning visual subordination within the National Scenic Area has been added to Section 3.2 of the EIS (please see response to comment #10054-032). Applicable Management Plan standards related to visual subordination would be further considered through the consistency review process for the proposed project.

10054-034

Impacts to Rare Ecosystems were not adequately reviewed.

The DEIS acknowledges that the project would lead to adverse impacts to rare cryptogamic soils and associated plant and wildlife communities. However, the DEIS fails to provide a robust discussion of the biological processes at work, the rarity of the resource, and the long-term impacts of destroying these soils. The DEIS should reference Washington Department of Natural Resource publications, such as the Columbia Hills Natural Area Preserve planning documents, in analyzing impacts to sensitive and rare ecosystems.

10054-035

Endangered Species

Several endangered plant and animal species may inhabit the analysis area. Pursuant to Section 7 of the Endangered Species Act, the BPA must consult with the National Marine Fisheries Service ("NMFS") and the Fish and Wildlife Service ("USFWS") to ascertain whether the alternatives would impact any threatened or endangered species.

Utility-related development in the Columbia Plateau, including the energy generation-transmission system, is contributing to a take in endangered bird species. The BPA must consult with the USFWS regarding potential take of endangered species. Since take is likely occurring, the BPA should consider preparing a Habitat Conservation Plan that ensures that adequate measures are in place to off-set the impacts to endangered species that result from the development of transmission facilities.

10054-036

Consultation with expert agencies – Lewis and Clark National Historic Trail

NEPA requires that BPA request comments from federal agencies with special expertise in the resources that would be affected by the proposed development. 40 C.F.R. § 1503.1(a)(1). NEPA requires that the BPA seek comments from state agencies and tribal governments. 40 C.F.R. §1503.1(a)(2). The NEPA regulations also requires that federal agencies respond to requests for comments: "Federal agencies with jurisdiction by law or special expertise with respect to any environmental impact involved and agencies which are authorized to develop and enforce environmental standards shall comment on statements within their jurisdiction, expertise, or authority." 40 C.F.R. § 1503.2. NEPA regulations also require that BPA prepare the DEIS "concurrently with and integrated with" required consultations. 40 C.F.R. § 1502.25(a).

The National Park Service's interest in the affected resources is evidenced by the Management Plan for the Lewis and Clark National Scenic Trail and recent mission statements that accompanied notices that the Park Service will be revising the Lewis and Clark Trail Management Plan: "Certain segments of the Lewis and Clark National Historic Trail *retain characteristics and a sense of place as seen and experienced by the original expedition and continue to provide opportunities for similar experiences today.*" Lewis and Clark Trail Master Planning Newsletter (July 27, 2010) (emphasis added). "Today the Missouri, Clearwater, and Columbia Rivers, their watersheds, and the overland routes across the Rocky Mountains have changed, however, *the natural resources and ecosystems that remain intact are fundamental to the experience of this Trail. These complex resources are critical to providing the context within*

- 10054-034 Section 3.3 of the EIS has been updated to clarify impacts on cryptogamic crusts and add reference to the Natural Area Preserve planning document.
- 10054-035 As described in Section 5.2 of the EIS, since no federally listed wildlife and plant species were found in the project area, and since BPA determined there would be no impacts on protected fish species and their critical habitat, consultation with USFWS and NOAA Fisheries under Section 7 of the ESA is not required. BPA will prepare a No Effect memo that will be sent to the USFWS and NOAA.
- 10054-036 Comment noted. As discussed in Section 5.17 of the EIS, BPA is coordinating with the National Park Service about the Lewis and Clark National Historic Trail and any issues related to the proposed project. The discussions of this National Historic Trail and the Oregon National Historic Trail in Section 5.17 have been updated to include additional relevant information about these trails.

10054-036
continued

which modern visitors experience the Trail and the story of Lewis and Clark.” Lewis and Clark Trail Master Planning Newsletter (July 27, 2010).

The Management Plan for the Lewis and Clark trail recognizes that many of the historic and cultural resources have been altered or lost and the Expedition left scant traces of their passing. However, “In a very real sense, many of the historic resources are the *landmarks, vistas, flora, and fauna* that make up the Trail’s natural resources. It is virtually impossible to find either historic or natural resources along the Expedition route, which have not been altered in some way by man or nature.” Lewis and Clark Trail Management Plan at 4 & 13. Thus, the scenic vistas and natural resources of the Expedition route are critical to appreciating the trail. Locations where those vistas and natural resources are intact are exceedingly rare, and warrant the detailed NEPA review.

The Columbia River segment, which includes the portions of the Trail that would be affected by the Whistling Ridge project, was designated for three types of trail development: a water trail, a land trail, and a motor route. The Columbia River, Interstate 84 and Washington State Route 14 are designated routes. The Management Plan notes that there was a “nearly continuous string of recreation sites along this segment.” Lewis and Clark Trail Management Plan at 70. Also, historic records show that William Clark ascended Haystack Butte to gain views of Mt. Jefferson. As such, the project may literally be in the footsteps of the Expedition.

The DEIS must include analysis of the detrimental and beneficial impacts of 1,150 MW of new wind energy on anadromous fish.

10054-037

The BPA has historically treated requirements to spill water through the hydroelectric system for ESA listed fish species as a “cost” of compliance with the Endangered Species Act. At times when wind generation and spring run-off are both high, supplying transmission capacity for wind generation facilities has resulted in the BPA spilling water to the detriment of fish. This has resulted in adverse impacts to ESA listed species. While the BPA has apparently resolved this issue, it should address the risk in its NEPA analysis. The BPA should also analyze whether spilling water to accommodate wind generation can be used to offset the cost of spilling water pursuant to ESA compliance. If spill is for both accommodating wind and complying with the ESA occurs at the same time, then wind energy may help pay for salmon recovery. At the least the BPA must ensure that the “costs” from integrating wind and complying with the ESA are not double-counted.

Conclusion

Thank you for this opportunity to comment, which preserves our standing.

Sincerely,



Richard Till
Conservation Legal Advocate

10054-037 The commentor is incorrect that BPA has spilled water to the detriment of fish when wind generation and spring runoff are both high. To the contrary, BPA has taken extraordinary measures to ensure that excessive spill that could injure fish does not occur during such times. Regardless, this issue is not relevant to the proposed transmission line. The suggestions of the commentor may be appropriate for other BPA forums. The commentor is encouraged to monitor such forums at http://www.bpa.gov/corporate/public_affairs/ for opportunities to raise their suggestions in the appropriate forum.

BEKD10055



Oregon
Theodore R. Kirkpatrick, Governor



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January 28, 2011

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Thank you for the opportunity to comment on the Draft Environmental Impact Statement for BPA's Big Eddy-Knight Transmission project.

The State agency responses are collected in the following pages:

10055-001

Oregon Department of Energy. This is a federal project that does not require an Energy Facility Siting Council (EFSC) certificate. However, several permits from state agencies are required in order for this project to proceed. In addition to these permits, the State of Oregon expects the project to meet EFSC standards for its entire length in Oregon, regardless of land ownership except for Tribal lands. These standards are well laid out in the DEIS as is BPA's commitment to meet them.

10055-002

Oregon Department of Transportation. Review of DEIS indicates no comment from ODOT. All the I-84 line crossings will be clear-spanning with no work or structures within ODOT right of way.

10055-003

Oregon Department of Environmental Quality. The Department of Environmental Quality (DEQ) appreciates the opportunity to comment on BPA's Big Eddy-Knight Transmission Project pertaining to water quality and Oregon's 1200-C permit of construction activities.

The draft EIS states there will be possibly one or more construction crews of up to 100 individuals each. The DEQ is concerned with implementation of appropriate training programs for individuals who may cause negative environmental impacts. In addition, sixteen to twenty-one miles of new roads will require wide-range erosion and sediment controls and maintenance, especially while running heavy vehicles during storms. The DEQ supports the use of Department of Ecology's Eastern Washington's Management Manual as guidance for this project, and recognizes the difficulty when construction operations impact so many stakeholders and requires compliance with so many different regulations from a range of agencies throughout Washington and Oregon.

10055-001	Comment noted.
10055-002	Comment noted.
10055-003	BPA shares Oregon DEQ's understanding of the importance of the enforcement of environmental regulations and environmental stewardship and ensuring measures are taken to mitigate possible environmental damage during construction activities. Throughout project implementation, BPA ensures that identified mitigation measures are used to protect specific resources and the general environment. During project design, towers are located to avoid sensitive resources where possible and roads are designed or located such that erosion is lessened. During preconstruction, permits are acquired, construction-specific mitigation measures or permit requirements are written into the construction specifications for the contractors to follow, maps are developed for use during construction to delineate areas to avoid, temporary fences are erected to limit construction access where needed, and field crew environmental training is conducted. During construction, various monitors are on site, including a BPA environmental specialist, a contractor Erosion and Sediment Control Lead, and a construction contract environmental specialist fully trained in hazardous waste management to ensure appropriate Best Management Practices and mitigation measures are working and to problem solve issues that may arise. Following construction, BMPs continue to maintain erosion control and the establishment of vegetation, etc. Please note that maximum number of workers (100) on the project would not be in one area at a time, they would be spread over the length of the line and at the substation site.

10055-004	All of the alternatives illustrate impacts, however, the West Alternative has the lowest soil erosion and landslide impacts. This alternative impacts the smallest area of Oregon but does potentially disturb high quality wetlands throughout Washington. Other environmental impacts will be highly affected by choosing the West Alternative. BPA preferred alternative, East Alternative, will require the most culverts and the greatest use of proper Best Management Practices (BMP) to reduce erosion rates on steep slopes. All alternatives will have challenges, therefore BMP selection and maintenance, training and permit regulations and compliance will be crucial in minimize environmental affects and impacts. Bonneville Power Administration must play a fundamental role in executing environmental stewardship, given the economic and enforcement staffing challenges of regulating agencies. Contact Krista Ratliff (krista.ratliff@deg.state.or.us, 541-633-2033)
10055-005	<u>Oregon Department of State Lands</u>, Removal-Fill Comments: Section 6.6.10 pg 6-2: Fifteen Mile Creek is listed as essential salmon habitat, so any removal/fill/alteration below OHW would require a Removal-Fill permit from DSL per OAR 141-085-0520(2). For impacts to the Columbia River and wetlands the threshold is 50 cubic yards per OAR 141-085-0520(4). It is recommended that a delineation be performed in accordance with OAR 141-090-0030 if wetlands occur within the proposed construction corridor and staging areas. This delineation should be submitted to DSL for review and concurrence. Contact Sarah Kelly (sarah.kelly@state.or.us, 541- 388-6060)
10055-006	<u>Oregon Department of Agriculture</u>, Our review of the DEIS does not indicate any comment needed from ODA at this time. Contact James Johnson (james.w.johnson@state.or.us, 503-986-4706)
10055-007	<u>Oregon Department of Land Conservation and Development</u>, No comments from DLCD's coastal program. Contact Juna Hickner (juna.hickner@state.or.us, 503-373-0050 x 242)
10055-008	<u>Oregon Department of Geology and Mineral Industries</u>, The Oregon Department of Geology and Mineral Industries review comments regarding the proposed Big Eddy-Knight Transmission Project DEIS are enclosed. We appreciate the opportunity to review and submit comments about the application to develop this infrastructure in Oregon. Please note we have limited our review comments to Section 3.4 Geology and Soils.
10055-009	These comments regarding the geology should be considered as baseline data that affects all other sections. For example, biological issues and site safety are directly affected by geological activity. We have determined that if our concerns are addressed in

- 10055-004 Comment noted. Please see response to comment #10055-003.
- 10055-005 In areas with unavoidable impacts to wetlands, all appropriate permits with approved wetland delineations and compensatory mitigation plans would be obtained prior to construction.
- 10055-006 Comment noted.
- 10055-007 Comment noted.
- 10055-008 Thank you for your comments.
- 10055-009 Comment noted. Please see the following responses to the more detailed comments on these issues.

10055-009
continued

Section 3.4 this would likely be sufficient to cover other sections. We do stand ready to review any other sections in detail that you might request.

Our review indicated that geology and geologic hazards have been considered and minimum steps taken by the applicant to acquire site specific geotechnical consulting. The importance of evaluating geology and geologic hazards is because of public safety, environmental issues, and reliability of the project. Our recommendations in the attached document and listed below indicate a need for more detailed evaluation of Oregon's geology and geologic hazards and explanation of mitigation and monitoring plans.

In summary we strongly recommend:

10055-010

□ A detailed seismic and geologic hazards evaluation and geotechnical hazard mitigation design should be performed by qualified licensed and/or registered professionals. If this has been done then those reviews should be referenced and made available in appendices.

10055-011

□ Perform comprehensive risk analyses of potential impact to the public and the environment due to transmission line/tower failure as a result of identified or potential geologic hazard or disaster.

10055-012

□ We note there is little discussion of monitoring geological hazards that are identified in the course of the transmission line geotechnical investigation. At the very least we recommend a monitoring program be designed in accordance to identified geologic hazards with regularly scheduled inspections and post event inspections, such as after earthquakes or storms.

Again we appreciate we could offer review of the DEIS with an emphasis on how to develop and operate this facility to ensure ecological continuity and safety.

10055-013

Section 3.4, Geology and Soils

Comment/Suggested alternate language. A detailed seismic and geologic hazards evaluation and geotechnical hazard mitigation design should be performed by qualified licensed and/or registered professionals. If this has been done then those reviews should be referenced and made available in appendices. All data in the DEIS should be referenced so anyone can understand the source data.

10055-014

Section 3.4, Geology and Soils

Comment/Suggested alternate language. Perform comprehensive risk analyses of potential impact to the public and the environment due to transmission line and/or tower failure as a result of identified or potential geologic hazard or disaster.

10055-015

Section 3.4, Geology and Soils

Comment/Suggested alternate language.

We note there is little discussion of monitoring geological hazards that are identified in the course of the geotechnical investigation. At the very least we recommend a monitoring program be designed in accordance to identified geologic hazards with regularly scheduled inspections and post event inspections, such as after earthquakes or storms.

- 10055-010 A detailed seismic and geologic hazard assessment was conducted by a qualified geotechnical engineer for the action alternatives. Results of the assessment were summarized in the maps displayed in Appendix I in the draft EIS. These maps have been updated to include Oregon Department of Geology and Mineral Industries (DOGAMI) geologic data and can be found in Appendix J of the EIS. Additionally, Map 3-6 of the EIS that displays the landslide areas found within the project area has been updated to include DOGAMI State Landslide Information Database of Oregon (SLIDO) landslide data.
- Seismic and geologic hazards for all route alternatives are described in Section 3.4.1 of the EIS. With respect to geologic hazard mitigation design as mentioned by the commentor, BPA's standard design practice is to use the combined case of wind plus ice loading when designing towers. As discussed in Section 3.4.2 of the EIS, because this design practice typically exceeds earthquake induced loads, seismic induced accelerations on the towers are not considered a geologic hazard.
- 10055-011 BPA designs its high-voltage transmission lines and towers to extremely high standards that largely negate the risk of failure during normal operations as well as enable them to withstand a variety of natural and other hazards. In addition, BPA conducts a rigorous inspection process of its lines and towers to rectify any line or tower situations that could potentially lead to failure if not addressed, thereby avoiding failure risks. Accordingly, a comprehensive risk analysis of potential impacts to the public and the environment due to transmission line and/or tower failure is typically not performed by BPA during transmission line project development. However, Section 3.4 has been updated to address potential landslide impacts. BPA's response to transmission line failure due to a disaster is addressed by BPA's emergency response plan as described in response to comment # 10042-002.
- 10055-012 As discussed in Section 3.4.2 of the EIS, BPA would monitor landslide areas as part of routine maintenance activities. BPA maintains multiple transmission lines on parallel routes through most of the mapped landslide and fault hazard areas within the project area. BPA transmission line maintenance crews regularly monitor existing towers for signs of distress. Potential active slide movement or ground rupture-caused problems would be observed at the existing transmission line towers during these annual maintenance crew tower inspections and twice-a-year helicopter inspections. Reported problems are documented in the BPA Geotechnical Library. No reported landslide-related problems with these lines were found in the BPA Geotechnical Library.
- 10055-013 Please see response to comment #10055-010.
- 10055-014 Please see response to comment #10055-011.
- 10055-015 Please see response to comment #10055-012.

10055-016	<u>Section 3.4.1, Geology, p. 3-72</u> <u>Comment/Suggested alternate language.</u> The geology in Oregon is discussed in this section of the DEIS. The current best available geologic maps in the proposed project area include DOGAMI publication OGDC-5 (Ma and others, 2009) and the DOGAMI Bulletin 91, which also discusses geologic hazards (Beaulieu, 1977). These should be reviewed and referenced and the geology in Section 3.4.1, rewritten to reflect the current information. We also recommend a comprehensive literature review, so that other current literature, such as those mentioned above, can be identified, referenced, and used to update the FEIS.
10055-017	<u>Section 3.4.1, Landslide Areas, p.3-72</u> <u>Comment/Suggested alternate language.</u> We recommend a comprehensive literature search and a detailed landslide hazard analysis prior to the FEIS. DOGAMI SLIDO (Statewide Landslide Information Database of Oregon) database identifies several landslides in the area of the proposed project (see attached maps). The landslide hazard analysis should include methods that are current standard practice, for example LiDAR bare earth imagery based landslide mapping and slope stability analysis. As a starting point for such an evaluation we recommend review of DOGAMI OFR O-00-04 Guidelines for Preparing Engineering and Seismic Reports.
10055-018	<u>Section 3.4.1 Seismic Risks, p. 3-73</u> <u>Comment/Suggested alternate language.</u> "There are no known active faults in the area." We note that the proposed transmission routes will cross several faults with unknown activity levels in Oregon (see attached maps). Furthermore, according to the best available data of Quaternary faults in Oregon (USGS OFR-03-095) at least 5 locations of intersection of faults and proposed transmission routes are located in Washington State within only a couple miles from the Oregon State Boundary. We recommend a comprehensive literature search and a detailed seismic hazard analysis prior to the FEIS. The detailed seismic hazard evaluation should include methods that are current standard practice, for example the use of LiDAR bare earth imagery to locate surficial evidence of faults and subsequent trenching to evaluate recurrence intervals. As a starting point for such an evaluation we recommend review of DOGAMI OFR O-00-04 Guidelines for Preparing Engineering and Seismic Reports.
10055-019	<u>Section 3.4.2, Common Impacts, p.3-74</u> <u>Comment/Suggested alternate language.</u> In this section, general drainage runoff issues are discussed. We recommend detailed evaluation and mitigation of existing and proposed site drainage, so that any landslide risk caused by the site is minimized or eliminated. This should include evaluating debris flow/flash flood hazards where the line crosses small drainages.
10055-020	<u>Section 3.4.2, West Alternative, Middle Alternative, and East Alternative, p.3-75 to 78</u> <u>Comment/Suggested alternate language.</u> "The West Alternative would potentially be affected by three possible landslide areas..." We recommend a comprehensive literature

- 10055-016 DOGAMI publication Oregon Geologic Data Compilation 5 (OGDC-5) and Bulletin 91 were reviewed and referenced during the assessment of seismic and geologic hazards. The results are summarized in the revised maps displayed in Appendix J of the EIS. Revisions to Section 3.4.1 of the EIS have been made to incorporate a reference to the hazard assessment maps in Appendix J.
- 10055-017 A comprehensive literature review was completed for the action alternatives, and a map summary of the review is displayed in Appendix J of the EIS. The DOGAMI SLIDO was reviewed during the literature review and has been incorporated into the revised Map 3-6 of the EIS. Additionally, DOGAMI OFR O-00-04, Guidelines for Preparing Engineering and Seismic Reports, has been reviewed by a qualified geotechnical engineer as part of the design for the action alternatives. The landslides identified in the SLIDO database supplement the landslides observed from aerial photo interpretation. Section 3.4.1 of the EIS includes an in-depth discussion of the possible landslide areas found along the route alternatives. No slides from the DOGAMI SLIDO are present on the proposed route alternatives. Additionally, proposed tower locations were visually inspected for signs of active landslide movement. Although signs of old, healed slumps were observed in mapped landslide areas, no active slides were observed near the proposed tower locations. Section 3.4.1 has been revised to incorporate a reference to the DOGAMI SLIDO. Also see response to comment #10055-011.
- 10055-018 Quaternary Faults of Oregon (USGS OFR-03-095) data were reviewed by a qualified geotechnical engineer during the detailed seismic and geologic hazard assessment discussed in response to comment # 10055-010. DOGAMI OFR O-00-04, Guidelines for Preparing Engineering and Seismic Reports, has also been reviewed by a qualified geotechnical engineer as part of the proposed project. The faults mentioned by the commentor are considered to have a low to moderate probability of surface rupture. Unless a surface rupture is visible, efforts to locate towers to avoid potential surface rupture is not considered practical. No surface ruptures were observed at the proposed tower locations. As discussed above in response to comment #10055-010, due to BPA's standard design practices, seismic induced accelerations on the towers are not considered a geologic hazard. The discussion of seismic risks in Section 3.4.1 of the EIS has been revised to include a reference to the seismic and geologic hazard assessment.
- 10055-019 As described in Section 3.4.2 of the EIS, transmission line towers and roads have been sited on the top of hills and ridge lines to avoid possible unstable locations. These types of tower locations generally avoid debris flow/flash flood hazards because the drainages are spanned by the wires. Additionally, as described in Section 3.4.2, proper road design would help avoid possible long-term erosion impacts from unstable slopes.
- 10055-020 As described above in the response to comment #10055-017, a comprehensive literature review was completed for the three route alternatives. A map summary of the review is displayed in Appendix J of the EIS. Additionally, the DOGAMI SLIDO was reviewed during the literature review and has been incorporated into the revised Map 3-6 of the EIS. Although the DOGAMI SLIDO maps several landslides in the vicinity of the West Alternative, a detailed evaluation of the proposed route alternatives indicates that the landslides identified in the database do not cross the proposed routes. Previously unmapped landslides were identified in the comprehensive geologic hazard assessment near the Middle and East alternatives' Columbia River crossing towers. These slides have been identified as inactive based on the lack of reported landslide-related problems with existing lines crossing the mapped landslide areas.

10055-020
continued

search and a detailed landslide hazard analysis prior to the FEIS. DOGAMI SLIDO (Statewide Landslide Information Database of Oregon) database identifies several landslides in the area of the proposed project (see attached maps). The landslide hazard analysis should include methods that are current standard practice, for example LiDAR bare earth imagery based landslide mapping and slope stability analysis. As a starting point for such an evaluation we recommend review of DOGAMI OFR O-00-04 Guidelines for Preparing Engineering and Seismic Reports.

As stated in the DEIS, "(appropriate engineering designs would lessen potential risk of landslides in these areas)" Again we recommend a comprehensive literature search and a detailed landslide hazard analysis prior to the FEIS. If the hazard is not properly evaluated and determined, engineering cannot be done correctly.

10055-021

Section 3.4.3, Mitigation Measures, p3-79

Comment/Suggested alternate language. "Conduct additional site-specific evaluations in areas of potential landslides to determine..." We recommend a comprehensive literature search and a detailed landslide hazard analysis prior to the FEIS and prior to any site-specific evaluations.

References

Burns, W.J., Madin, I.P., Ma, L., 2008. Statewide Landslide Information Database of Oregon Release-1, Oregon Department of Geology and Mineral Industries, SLIDO r-1

Ma, Madin, Olson, Watzig, Wells, Niem, and Priest, 2009. Oregon Geologic Data Compilation (OGDC) – Release 5, Statewide Geologic Map, Oregon Department of Geology and Mineral Industries.

DOGAMI OFR O-00-04 Guidelines for Preparing Engineering and Seismic Reports.
http://www.oregon.gov/OSBGE/pdfs/eng_rpt_guidelines.pdf

Map #1 - Earthquakes since 1833 (*Attached*)

Map #2 - GEOLOGIC HAZARDS – Earthquakes (*Attached*)

Map #3 - GEOLOGIC HAZARDS - Potentially Active Faults (*Attached*)

Map #4 - GEOLOGIC HAZARDS - Mapped Landslide Debris Flow Deposits (*Attached*)

Contact Bill Burns (bill.burns@state.or.us, 971- 673-1538) or Vicki McConnell (vicki.mcconnell@state.or.us, 971-673-1550) for clarification, questions, further details.

Oregon Department of Fish and Wildlife. Oregon Department of Fish and Wildlife (ODFW) appreciates the opportunity to provide our comments on the draft EIS prepared for the proposed Big Eddy-Knight Transmission Project. Our comments are as follows.

10055-021 As discussed above in response to comment #10055-010, a detailed seismic and geologic hazard assessment was conducted by a qualified geotechnical engineer for all route alternatives.

10055-022

1. ODFW would like to see a breakdown by habitat category (ODFW's Fish and Wildlife Habitat Mitigation Policy) of lands that would be permanently and temporarily impacted by the construction of towers and roads within the proposal area. ODFW would ask for compliance with mitigation standards as designated within our policy. As the majority of Middle and East alternatives follow an existing power corridor and right-of-way; and the West alternative travels a very short distance on the Oregon side of the Columbia; no Category one or two habitats would be expected, but should they be present our preference would be that they are avoided.

10055-023

2. Looking at Table 2-8, proposed mitigation measures for wildlife list only Golden Eagles, Peregrine and Prairie Falcons as species with nesting season limitations. ODFW would like to suggest that the following species and timeframes be considered when avoiding nesting season disturbances:

<u>Species</u>	<u>Sensitive nesting period</u>	<u>No Construction Conservation Zone</u>
Swainson's hawk	April 1 – August 31	1300 feet
Prairie falcon	March 1 – July 30	1300 feet
Peregrine falcon	March 1 – August 31	Discuss with ODFW
Bald eagle	January 1 – August 31	Discuss with ODFW
Burrowing owl	March 15 – August 30	1300 feet
Loggerhead shrike	April 15 – September 1	800 feet
Ferruginous hawk	March 1 – August 15	1300 feet
Golden eagle	January 1 – August 31	1300 feet
Grasshopper sparrow	May 1 – June 30	800 feet
Long-billed curlew	March 1 – September 30	800 feet
Vesper sparrow	April 15 – September 1	800 feet

All of the above special status wildlife have the potential to be within the proposed project area.

10055-024

3. In looking at a preferred alternative, all three proposals are generally within existing power corridors or disturbed areas. ODFW would not necessarily have a preference on which of the three alternatives BPA chooses to proceed with.

Contact Jeremy Thompson (jeremy.thompson@state.or.us, 541-296-4628)

- 10055-022 The additional information requested has been added to Section 3.6 and Appendix D of the EIS. Changes to mitigation measures have been made in Sections 3.3.3 and 3.6.3 to address possible habitat impacts, and BPA will do a follow-up consultation with ODFW for specific impacts.
- 10055-023 BPA has identified suspected golden eagle, prairie falcon, peregrine falcon, and bald eagle nest sites along the proposed project. No nests of the other species listed were found during project surveys. Prior to the beginning of construction, the known nest sites would be checked for active nests. If active nests are found, construction would be prohibited within 0.25 mile of the nest site until the young have fledged. In some cases, some construction activities (e.g., vehicular and equipment travel) may need to take place within 0.25 mile of the nest site to meet outage schedules. Where possible, these activities would be batched and minimized.
- 10055-024 Comment noted.

Oregon Department of Parks and Recreation, State Historic Preservation Office

Note: The following comments were submitted to BPA on Dec. 28, 2010 via letter.

10055-025 | Our office recently received a Draft Environmental Impact Statement (DEIS) for the project referenced above. In reviewing the DEIS I find that only portions of each of the alternatives have been surveyed. With the limited access it is difficult to predict where additional cultural resources may be encountered. Given the varying physiographic areas this project crosses our office would require additional pedestrian survey of the project corridor and subsurface excavations to identify unknown cultural resources once a preferred alternative is chosen.

10055-026 | Once the preferred alternative is selected, the project corridor is surveyed and cultural resources have been identified, those that can not be avoided will need to be evaluated for National Register of Historic Places significance. Those resources that are determined eligible and cannot be avoided will need to be mitigated for the adverse effects. This will require a Treatment Plan for Historic Properties that outlines the resources and the adverse effects as well as the mitigation plans. Our office looks forward to working with you through this process of determining eligibility and level of effect.

10055-027 | As it is not possible to identify all cultural resources even with pedestrian survey and subsurface excavation, our office would require an Inadvertent Discovery Plan that will outline the procedure for dealing with cultural resources that are identified during construction.

10055-028 | State statutes (ORS 358.905 and ORS 97.740) provide protection for archaeological sites, objects, and human remains on both state public and private lands in Oregon. I hope that by providing the above-suggested archaeological survey, damage to any archaeological sites in the area of your proposed project can be avoided.

Contact Dennis Griffin (dennis.griffin@state.or.us, 503-986-0674)

We look forward to continued collaboration on the Big Eddy-Knight Transmission project.

Best Regards,



Thomas M. Stoops, Division Administrator
Energy Siting Division

Letter#2011-006

- 10055-025 Additional surveys along with subsurface testing are being conducted to adequately identify cultural resources in the project area. Please also see response to comment #10049-016.
- 10055-026 Additional surveys along with subsurface testing are being conducted to generate sufficient data to make determinations of eligibility. Once determinations of eligibility have been made BPA would assess effects following 36 CFR 800.5. If a determination of adverse effect is made BPA would then resolve adverse effects following 36 CFR 800.6.
- 10055-027 Preparation of an Inadvertent Discovery Plan is identified as a mitigation measure in Section 3.8.3 of the EIS. BPA would prepare this plan with input from the SHPO, other agencies, and affected Tribes.
- 10055-028 BPA anticipates that the cultural resource inventory and subsurface testing will provide sufficient information regarding the locations of archaeological sites that any potential effects will be known prior to implementation of the project so that appropriate consultation with the SHPO, affected Tribes, and other agencies as applicable can be conducted.

BEKD10057

Jude and David Russell
heyjude9@centurylink.net

- 10057-001 | Please, please, please route the transmission lines and optical cable farther to the east of The Dalles Mt. Area. That is one of the most scenic and special areas of The Columbia Gorge those of us who love The Gorge do not want it degraded any further. I think it is called the East Alternative. Thank you. Jude Russell

BEKD10058

Lynn Bergeron

- 10058-001 | I write in SUPPORT OF THE EAST ALTERNATIVE that minimizes the scenic and on-the-ground impacts to the Dalles Mountain. I hike this area, camera at the ready, a couple times every year. This fragile landscape hosts an explosion of wildflowers of many species - the shy and the showy. It is the only place I have ever seen a horned toad in the Gorge. I want to keep coming back here for as long as I can walk - and haul the next couple generations with me. The Dalles Mountain is a local and national treasure - worthy of National Geographic coverage. When I watch nature videos of special places around the world, I think, "Hey, we've got something that good right here!" Let's preserve and protect it.

BEKD10059

Form e-mail from 246 Correspondents:

Subject: DEIS for the Big Eddy-Knight Transmission Project

- 10059-001 | I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project and its potential impacts on the Columbia River Gorge, a place I care about protecting for future generations to enjoy. The Columbia River Gorge National Scenic Area is a spectacular area, recognized by Congress for its unparalleled scenic vistas and outstanding natural landscapes. Because the project is proposed within a National Scenic Area and there is a substantial likelihood of adverse effects resulting from each one of the action alternatives, the BPA should extend the comment period to 90 days. The BPA should also hold hearings in major population areas like the Portland/Vancouver metro area so that the public has an adequate opportunity to review and comment on this project, since the project's direct and indirect impacts could affect the entire region.
- 10059-002 |
- 10059-003 | The BPA's DEIS fails to consider alternatives that avoid siting new transmission lines within the National Scenic Area. The DEIS also fails to adequately consider alternatives that would place underground all or portions of new transmissions lines within the Scenic Area. The National Scenic Area Management Plan (M.P.) requires new power lines to be underground, unless it can be demonstrated to be impracticable. (M.P. Page I-1-10)
- 10059-004 | "Practicable" is defined as "able to be done, considering technology and cost." (M.P. Glossary-14) Clearly, the BPA is able to place the lines underground and should, considering the proposed alternatives are located within a congressionally designated National Scenic Area.

10057-001 Comment noted.

10058-001 Thank you for your comments. Potential impacts to Columbia Hills State Park and Natural Area Preserve are discussed in various sections of Chapter 3 of the EIS. Your alternative preference has been noted.

10059-001 Please see the response to comment #10027-001.

10059-002 Please see the response to comment #10027-002.

10059-003 Please see the response to comment #10027-003.

10059-004 Please see the response to comment #10027-004.

- 10059-005 | Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National Environmental Policy Act and the National Scenic Area Act. However, the eastern route follows an existing power line easement through the Scenic Area and appears to have less impacts than the middle and west alternatives.
- 10059-006 | The western and middle alternatives should have been dropped from consideration during the "scoping" phase of environmental review. These routes are near or within a state park, a natural area preserve, the Columbia Hills "Important Bird Area," rare plant habitat, oak woodlands listed as critical habitat in Washington State, and endangered species habitat. The western route would pass through the National Scenic Area, Columbia Hills State Parks and Columbia Hills Natural Area Preserve, resulting in egregious impacts to scenic, natural, cultural and recreation resources.
- 10059-007 | As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines should be placed
- 10059-008 | underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.

10059-005 Please see the response to comment #10027-005.
10059-006 Please see the response to comment #10027-006.
10059-007 Please see the response to comment #10027-003.
10059-008 Please see the response to comment #10027-004.

BEKD10059

Form E-mail Correspondents

Alford, Steve	Cohn, Sharilyn	Greene, Helena
Allen, Leslie	Colasurdo, Christine	Greer, Carol & William
Anderson, Judy	Coles, Vivian	Griffith, David
Anderson, Lyle	Combe, Emile	Grout, Mary
Archer, Bill	Cooper, Jill	Hafer, Sarah
Armentrout, Barry	Costa, Demelza	Hanks, Laura
Arnold, Patricia L.	Craig, Edward	Hayden, Mary
Askins, Susanna	Cuevaz, Tonya	Head, Kevin
Aszman, Jan	Culver, Jake	Henry, Robert
Bagatta, Joanna	Cummings, George	Hermesen, Laurence
Baltz, Barbara	Curran, Claudia	Hewitt, Lorna
Bard, Holly	Dee, Lenny	Holdrege, Julian
Becker, Michael	Dennis, Lor	Horne, Jeff
Beinlich, Brian	Denton, James	Houston, Mandi
Benedict, Susan	Dlugonski, Melba	Howard, John
Bennett, Henry	Dondlinger, Rebecca	Hummel, Valoree
Berger, David	Doolen, Sue	Ignatowski, Benjamin
Berlly, Bella	Drach, Loreley	Rob, J
Binegar, Mary	Dunni, Huelo	Jackson, Aria
Bisbjerg, Peder	Dunn-Dixon, Jennie Sue	Jackson, Nate
Blair, Cathy	Dupere, Susan	Jacobson, Don
Blake, Aaron	Eckel, Carolyn	Jaffee, Dan
Blanchard, Glenn	Efoli, Elena	Jeka, Kymberly
Blanchard, Norma	Ellis, Cyndi	Johnson, Michael
Blauvelt, Margaret	Elmi, Ali	Johnson, Stephen
Blossom, Camilla	Englert, Walter	Jones, Heidi
Boatsman, Carolyn & Mark	Ensign, Dianne	Jones, Teresa
Bohn, Anthony	Foehl, Katie	Joyce, Mary Anne
Brent, Patricia	Fruehauf, Heiner	Kaufman, Albert
Brown, Keith	Fulle, Brenda	Kay, Joel
Browning, James & Linda	Geisler, Eric	Keairnes, Tara
Brumfield, Cort	Gendvil, Derek	Keene, Margaret
Bruning, Julie	Gerdes, Cynthia	Kelly, Wayne
Bryan, Alison	Gerth, John	Knowles, JoAnne
Butcher, Jean	Glassberg, Planet	Lahr, Corie
Carlson, Sandra	Goechermann, John	Lamson, Karen
Charles, Susan	Gohl, Joy	Lange, Thomas
Christian, Steven	Gohl, Larry	Laws, Kathleen
Clifton, Merle	Grammer, Kaitlin	Litkie, Julie
Cohen, Alicia	Grant, David	Locklear, Alan
	Graser-Lindsey, Elizabeth	Long, Meredith

Form E-mail Correspondents

Lovejoy, Patricia & Michael	Peterson, Kathryn	Streicker, Gail
Lyda, Mary	Piranio, Michelle	Sweeney, Jenny
Maney, Trudy	Pittenger-Stanley, Julie	Swenson, Lennart
Mara, Scott	Platner, Jack	Tardy, Kathy
Marks, Karen	Platner, Nancy	Terry, Rod
Marney, Thomas	Polk, Nora	Test, Test
Martin, Ron	Polychronis, Jan	Thomson, Arran
Matthiessen, Erin	Popiela, Hank	Thorson, Joel
Mauldin, Marianne	Pradelt, Meg	Toll, Betsy
McClay, Mauria	Pryse, Vicki	Tombleson, Barbara
McComb, Melinda	Rancher, John	Turner, Laurie
McElravey, Toby	Reading, Trish	Valleroy, Marie
McKamey, Will	Reedijk, Linda	Vanderzanden, Helen
Meier, Sherry	Rehn, Debra	Jean
Miesen, Steven	Reich, Norma	Vaughan, Ron
Mildrexler, David	Richardson, Larry	Vayu, Satya
Miller, Dave	Rosenblit, Joel	Velez, Martin
Miller, Jacquelyn	Russell, Aubrey	Wadsworth, John
Minick, David	Russell, Sarah	Wallsmith, Sandra
Monial, Sara	Saul, Susan	Watters, Ann
Morris, Brenda	Schnoor, Carl	Waugh, Ann
Moylan, Carrie	Schwartz, Elizabeth	Welch, James
Muirhead, Bruce	Seil, Fredrick	Welsh, Bob
Murray, Tammie	Shelley, Ian	West, Alice
Nadler, Suzanna	Sherer, Janice	West, Judy
Nagel, Lawrence	Simonsen, John	Westly, Hazel
Nettleton, John	Smirnov, Alexander	Wheeler, Kitty
Nichols, David	Smith, Christine	Willmarth, Greg
Nikkel, John	Smith, Owen	Windom, Bob
Noonan, Elaine	Smith, Shannon	Winzig, Mary
Nuessle, Charlotte	Soden, Mary	Wood, John & Polly
O'Brien, Bill	Squier, Jonathan	Wood, Thomas
Orlinski, Patricia	Steadman, Jane	Wood, Wendell
Owen, Kim & Pamela	Steel, Steel	Wright, Colleen
Papke, Rebecca	Stege, John	Young, Steven
Partenheimer, Andrea	Steinberger, Judy	Yun, Christine
Patton, Teresa	Stephens, Don	Yuska, Joseph
Percy, Susan	Stevens, Deena	Zachman, John
Peter, Joerg	Stewart, Tracina	Zucker, Marguery, Lee
Peters, Doug	Stone, Catherine	
	Stover, Dawn	

BEKD10060

Kissler Family Trust

January 17, 2011

Mr. Steve Prickett
Project Manager
Bonneville Power Administration
P.O. Box 61409
Vancouver, WA 98666-1409

Subject: Bid Eddy/Knight Transmission Project

Dear Mr. Prickett:

As indicated in my January 17, 2011 e-mail to you I have enclosed visual exhibits comparing single and double circuit poles to the existing 115 kv poles adjacent to our property in Mustang Ranch Sub-Division. Please place these exhibits into the public record of the Big Eddy/Knight Transmission project and drop me an e-mail you received this correspondence.

I appreciate the communication you have provided me addressing public process procedures and including all the EIS reports for a better understanding of the project.

Respectfully:

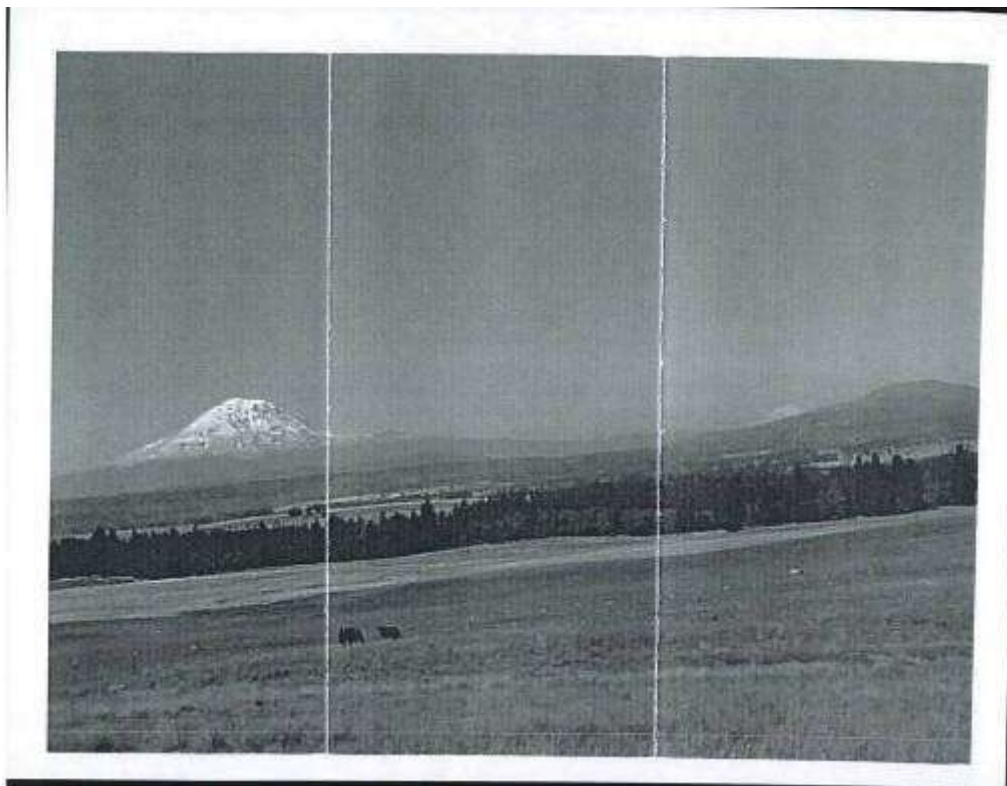


Rob Kissler

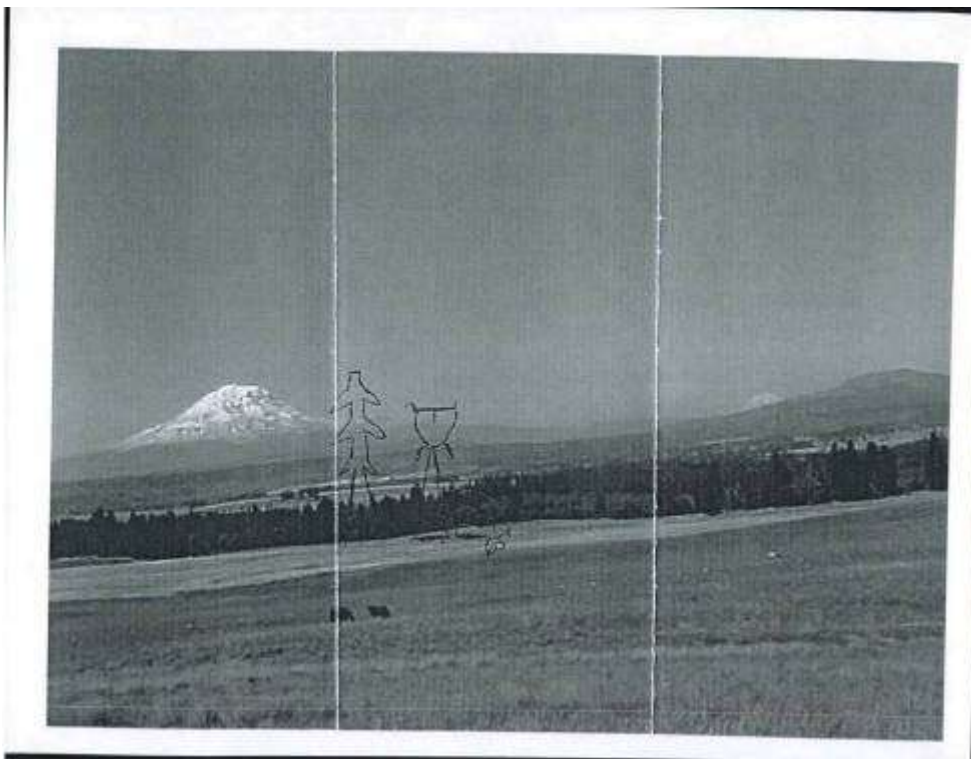
10060-001

10060-001 Thank you for the exhibits. They are part of the public record.

- 1. Photo of existing 115-kV transmission line poles near Kissler property in Klickitat County, Wash. (Comment #BEKD10061)**



- 2. Schematic of proposed single- and double-circuit 500-kV transmission line towers near Kissler property in Klickitat County, Wash. (Comment #BEKD10061)**



End of responses for previous correspondence.

BEKD10061

Lenny Anderson
Gisela Foerstermann

January 17, 2011

Bonneville Power Administration
Public Affairs Office, DKE-7
P.O. Box 14428
Portland, OR 97293-4428

re: Big Eddy-Knight Transmission Project

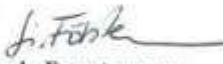
To Whom It May Concern:

- 10061-001 | The BPA's selection of the East Alternative as the Preferred Alternative in the Big Eddy-Knight Transmission Draft EIS represents the best of three poor choices. We remain troubled by the "industrialization" of rural Klickitat county and by the negative impacts of even the East Alternative on views, habitat and the local economy.
- 10061-002 | BPA notes that this project was proposed as the result of a regional review concluded in February 2008, reflecting a time of rapid economic expansion with multiple wind power proposals. Since that time, as we all know, a lot has changed and projected demand for transmission should be re-evaluated in light of these changes.
- 10061-003 | The DEIS notes that the need for Big Eddy-Knight is driven by requests for firm transmission service. We think it is fair to ask "requests from whom?" in light of the impacts on the east end of the Columbia Gorge and Klickitat county in particular.
- 10061-004 | Our guess is those requesting "firm service commitments" would like to route some of the power now moving from east to west on the Wautoma-Ostrander line to the Big Eddy Substation for transmission to California.
- 10061-005 | While as rate payers in both Portland and Klickitat county, we are happy to have summer surplus power sold to keep LA cool, we think its fair to ask those regions to look at adjusting their thermostats before requesting "firm transmission commitments."
- 10061-006 | Indeed, with the coming shutdown of the Boardman coal fired power plant, we may well need more of this locally generated power for use here in the Northwest.
- 10061-006 | While the BPA does not set policy for power generation and transmission, the body that does, the NW Power Planning Council, has strongly recommended that both public and private utilities place a much stronger emphasis on energy conservation.

- 10061-001 Comment noted. BPA recognizes that wherever the line route is located, it would impact some habitat, as well someone's property and views (see Sections 3.1, 3.2 and 3.9 of the EIS).
- 10061-002 To clarify, the Big Eddy-Knight Project was being considered by BPA well before the 2008 NOS process referenced by the commentor, due to increasing requests for transmission service along this pathway and the reliability benefits such a project would provide. As discussed in responses to comments #10054-010 and #10054-017, the NOS process was a mechanism used to clear and organize transmission service requests that had been submitted into BPA's transmission service request queue, and many of the requests that would be served by proposed transmission projects such as the Big Eddy-Knight Project were already in the queue well before the NOS process was conducted. Even with more recent fluctuations in economic conditions, the demand for long-term, firm transmission service along this pathway remains and, accordingly, so does the need for this proposed transmission line to respond to these requests.
- 10061-003 Comment noted. Requestors of firm transmission service in the 2008 NOS are identified in a November 20, 2008 document entitled "PTSA Summary by Cluster," which is available at:
http://transmission.bpa.gov/Customer_Forum/open_season/docs/PTSA_Summary_by_Cluster.pdf. Request for service to which the proposed project responds were received primarily from Horizon Wind Energy LLC, enXco Development Corp., and Iberdrola. Chapter 4 of the EIS has been updated to more specifically identify existing and proposed wind generation in the project area associated with these transmission service requests.
- 10061-004 Comment noted. As discussed in Sections 1.1 and 1.2 of the EIS, the proposed project would allow BPA to provide firm transmission service to service requests that are mainly seeking to move power from the east side of the Cascade Mountains (e.g., eastern Washington and Oregon) to load centers west of the Cascades and to major transmission lines serving California. It is energy developers and owners that have made the requests for transmission service to which BPA is responding, rather than any particular region either in or outside the Pacific Northwest.
- 10061-005 Comment noted.
- 10061-006 While the Council's emphasis on energy conservation is noted, efforts toward energy conservation would not address the need for additional transmission capacity in the project area due to existing transmission service requests. The proposed transmission line is on a key transmission path in the region, and BPA believes that there is, and will continue to be, sufficient demand for transmission service in this area to justify the proposed project. Please also see response to comment #10054-006.

10061-007

That and the growth of locally sited solar and wind generation could well place Big Eddy/Knight in the "nice to have, but not essential" category. At a time when we all are trying to do more with less, advancing the No Build Alternative should be the true "Preferred Alternative" for this project.

Sincerely,
 
Lenny Anderson & Gisela Foerstermann
NE Portland & Horseshoe Bend

10061-008

PS Regarding our land, located on the West Alternative between mile 17 and 18, the DEIS failed to note that it is a combination of dryland alfalfa/fescue cropland and recovering grassland/steppe with a white oak riparian zone and year around spring. It lies adjacent to the Columbia Land Trust's Eckton Ranch and is managed for wildlife habitat.

- 10061-007 Comment noted. Please see responses to comments #10061-002 and #10061-006.
- 10061-008 The location of the property referenced is unclear. Section 3.1 of the EIS describes the conservation easement on the Eckton Ranch in this vicinity and the impacts to that land use. Section 3.3 describes impacts to shrub-steppe habitat and ponderosa pine woodlands in this area. The proposed West Alternative in this area would not impact any springs.

BEKD10062



STATE OF WASHINGTON
WASHINGTON STATE PARKS AND RECREATION COMMISSION

EASTERN REGION HEADQUARTERS • OPERATIONS DIVISION
270 9th Street NE, Suite 200 • East Wenatchee, WA 98802 • (509) 665-4319
Washington Telecommunication Relay Service (TDD) 800-833-6388

January 18, 2011

BPA Public Affairs Office
DKE-7
P.O. Box 14428
Portland, OR 97293-4519

SUBJECT: Big Eddy-Knight Transmission Project DOE/EIS-0421, Draft Environmental Impact Statement - Comments

10062-001

State Parks supports the choice of the East Alternative, after reviewing the options that would minimize impact to natural and cultural resources. The preferred option for the routing of the power lines and location of the substation would have no impact on nearby State Parks sensitive resources or user experiences.

10062-002

Our primary concern is to protect the important, cultural landscape of Columbia Hills State Park, Dalles Mountain Ranch Historic District; state endangered species within Columbia Hills and the Klickitat Trail; and the natural viewscape along the Klickitat Trail within Swale Canyon. The East Alternative will help continue this protection.

10062-003

The ranch is an important area retaining many aspects of the original homestead landscape; it is designated as a state historic site. Taken together, the Crawford Ranch, other homestead sites and the cultural landscape represent an increasingly rare historic resource with high integrity that have been evaluated and placed on the Washington Historic Register.

10062-004

The East Alternative also avoids impacting the Obscure Buttercup – a state endangered and federal species of concern. Several areas of this plant exist within Columbia Hills State Park.

10062-005

The East Alternative will help us to protect these locations, while also avoiding any potential impact to steelhead spawning areas along the Klickitat Trail within Swale Canyon.

10062-006

State Parks appreciates the time spent by the BPA staff to meet on site and discuss the project, as well as the time taken to evaluate and consider our issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim Harris".

Jim Harris, Region Director

- | | |
|-----------|---|
| 10062-001 | Preference is noted. |
| 10062-002 | Sections 3.1, 3.2, and 3.8 of the EIS address land use, visual, and cultural resource impacts along the West Alternative through the areas mentioned. |
| 10062-003 | Comment noted. |
| 10062-004 | Section 3.3 of the EIS addresses potential impacts to obscure buttercup within the Columbia Hills State Park. |
| 10062-005 | Comment noted. Section 3.7 of the EIS addresses potential impacts to fish in Swale Creek. |
| 10062-006 | Thank you for taking the time to meet with BPA. |

BEKD10063

Schimschok Craig A

To: BONNIEVILLE POWER ASSOCIATION
Subject: KNIGHT ROAD SUBSTATION , GOLDENDALE WASHINGTON

10063-001

IT HAS BEEN A COUPLE WEEKS SINCE I PUT IN MY DEMAND TO FIND OUT EXACTLY WHERE THESE PROPOSED SITES ARE GOING TO BE (EAST AND WEST SITES) . ENCLOSED IN THE FAX AND REGISTERED LETTER I SENT YOU WAS A COPY OF THE PLOT MAP WHERE MY PROPERTY IS LOCATED . THE AREA WHERE THE PROPOSED SITES ARE I HAVE VISITED . WHAT WE COULD READ OFF THE SURVEY STAKES , I ASSUME IS THE EAST SITE . BUT I AM NOT POSITIVELY SURE . THE WEST PROPOSED SITE WE ARE NOT SURE OF AT ALL . THIS IS WHY I WANT TO KNOW EXACTLY WHERE THE PROPOSED EAST AND WEST SITES ARE LOCATED , I WANT TO KNOW THE EXACT LOCATIONS IN RELATION TO MY PROPERTY , YOUR MAP IS TOO VAGUE .

10063-002

MY PROPERTY THERE I HAVE INVESTED ALLOT OF MY TIME AND MONEY FINDING THE RIGHT LOCATION FOR WHAT I WANTED . THE LAST THING I WANT IS SOME NOISY EYE SORE NEXT TO MY PROPERTY , THIS IS WHY I WANT THE EXACT LOCATIONS .

WHY DON'T YOU BUILD THE SUBSTATION BY KNIGHT ROAD . IF YOU PUT IT BY KNIGHT ROAD ON THE SOUTH SIDE OF YOUR EXISTING POWER LINES THERE IS A DROP IN THE LAND . PUT IT ON THE LOWER AREA . THE CLOSEST HOUSE IN SIGHT IS ALMOST 2.5 MILES AWAY . THERE IS EASY ACCESS TO AND FROM KNIGHT ROAD . THAT'S WHERE I THOUGHT YOU WERE GOING TO PUT IT IN THE FIRST PLACE . THAT WAY , HOPEFULLY , I WONT HAVE TO SEE IT AND/OR HEAR IT .

ENCLOSED IN THIS LETTER IS ANOTHER COPY OF THE PLOT MAP THAT INCLUDES MY PROPERTY , MY PROPERTY IS SECTION 12 . MY MAILING ADDRESS IS BELOW .

SINCERELY

Craig A. Schimschok

RECEIVED
FEB 8 2011

- 10063-001 Please see response to comment #10003-001.
- 10063-002 Please see response to comment #10003-002. BPA is considering two substation sites: Site 1, the preferred alternative, is about 2,000 feet to the west of Knight Road and Site 2 is about 3,200 feet to the west of Knight Road. Please see Chapter 2 for a new Map 2-2 showing more detail of the substation locations.

BEKD10064

Holly Griswold

[Street Address] • [City], [State] [Postal Code]
Phone: [Your Phone] • Fax: [Your Fax] • E-Mail: [Your E-Mail]

January 24, 2011

Bonneville Power Administration Public Affairs Office--DKE-7



P.O. Box 14428
Portland, OR 97293-4428
Fax: (503) 230-3285

RECEIVED
FEB 8, 2011

Dear BPA,

Subject: DEIS for the Big Eddy-Knight Transmission Project

I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Big Eddy-Knight Transmission Project and its potential impacts on the Columbia River Gorge, a place I care about protecting for future generations to enjoy.

- 10064-001 | The Columbia River Gorge National Scenic Area is a spectacular area, recognized by Congress for its unparalleled scenic vistas and outstanding natural landscapes. Because the project is proposed within a National Scenic Area and there is a substantial likelihood of adverse effects resulting from each one of the action alternatives, the BPA should extend the comment period to 90 days. The BPA should also hold hearings in major population areas like the Portland/Vancouver metro area so that the public has an adequate opportunity to review and comment on this project, since the project's direct and indirect impacts could affect the entire region.
- 10064-002 |
- 10064-003 | The BPA's DEIS fails to consider alternatives that avoid siting new transmission lines within the National Scenic Area. The DEIS also fails to adequately consider alternatives that would place underground all or portions of new transmissions lines within the Scenic Area. The National Scenic Area Management Plan (M.P.) requires new power lines to be underground, unless it can be demonstrated to be impracticable. (M.P. Page I-1-10) "Practicable" is defined as "able to be done, considering technology and cost." (M.P. Glossary-14) Clearly, the BPA is able to place the lines underground and should, considering the proposed alternatives are located within a congressionally designated National Scenic Area.
- 10064-004 |
- 10064-005 | Aside from the "No Action" alternative, all of the alternatives under consideration are likely to harm scenic, natural, cultural and recreation resources within the Scenic Area in violation of the National

10064-001 Please see response to comment #10027-001.
10064-002 Please see response to comment #10027-002.
10064-003 Please see response to comment #10027-003.
10064-004 Please see response to comment #10027-004.
10064-005 Please see response to comment #10027-005.

10064-005
continued

Environmental Policy Act and the National Scenic Area Act. However, the eastern route follows an existing power line easement through the Scenic Area and appears to have less impacts than the middle and west alternatives.

10064-006

The western and middle alternatives should have been dropped from consideration during the "scoping" phase of environmental review. These routes are near or within a state park, a natural area preserve, the Columbia Hills "Important Bird Area," rare plant habitat, oak woodlands listed as critical habitat in Washington State, and endangered species habitat. The western route would pass through the National Scenic Area, Columbia Hills State Parks and Columbia Hills Natural Area Preserve, resulting in egregious impacts to scenic, natural, cultural and recreation resources.

10064-007

10064-008

As the BPA moves forward with this project it should develop an alternative route that avoids adverse impacts on resources within the Columbia River Gorge National Scenic Area. If the eastern route is selected, then the transmission lines should be placed underground in order to comply with the National Scenic Area Act. Thank you for the opportunity to comment.

Sincerely,

Holly Griswold
Hiker, worker, resident of The Gorge

10064-009

I don't usually use form letters, but this one captured my concerns.

Please do not compromise the Columbia Gorge NSA by running additional high voltage transmission lines across the undeveloped land.

I do not believe these landscapes need to be sacrificed.

You may value above all efficient energy transmission. But, many others, like me, have different priorities and wish for scenic beauty and wildlife habitat to be valued most highly as we meet our energy needs.
Holly Griswold.

10064-006 Please see response to comment #10027-006.
10064-007 Please see response to comment #10027-003.
10064-008 Please see response to comment #10027-004.
10064-009 Thank you for your comments.

BEKD10065

846 Centerville Hwy.
Lyle, WA 98635
January 22, 2011

Comments on Big Eddy-Knight Transmission Project

10065-001 | The purpose of this project has been summed up to "distribute power from the wind turbines to California". Why not put the substation and towers in the location of the wind turbines along the Columbia Hills and bypass the Goldendale and Centerville valleys completely?

10065-002 | New wireless technology if implemented would put a greater number of people to work in a sustainable industry that wouldn't destroy the beauty of our region and severely impact industries such as agriculture and real estate markets. Both are long term commodities that can't be compensated for by a "value of the land" right of way payment. Land values are currently at a low, landowners would receive a pittance that wouldn't take into consideration the forever loss of value. Towers can be viewed for miles and negatively impact land value miles from the actual right of way.

10065-004 | A few words in a 500 page manual have considered and dismissed the value of wireless technology. More study is needed. BPA could install and maintain wireless technology and shouldn't consider it a threat to the BPA domain. BPA representatives comment that the wireless technology can only be used locally and it is not a method to transmit power. If wireless technology was implemented locally, less power from other sources would be needed locally and the excess could be shipped to California and other markets.

10065-005 | Some have commented to put the new towers where BPA currently has easements as those owners already are impacted and know the right of way is there. That may be true of the metal towers now in place but not where there is a wooden pole similar to a PUD service line. What is proposed would be a devastating change.

10065-006 | The three routes across the Goldendale and Centerville valley pit neighbor against neighbor. All would be devastating. The East Alternative would be less intrusive to my son's land but not to friends' (generations old) property.

10065-007 | I pray for the day when wireless technology will mean that existing metal towers and wooden pole transmission lines can be removed. I don't expect to live that long but would love to think that our children and grandchildren will see the day. Why spend this kind of taxpayer money for dinosaur technology?

Please choose the No Action Alternative for this study (or use the Columbia Hills wind turbine route) and seriously work on a new wireless technology study that will truly be progress.

Respectfully submitted,



Lorna Dove

- 10065-001 As discussed in Section 1.2 of the EIS, BPA needs to respond to requests for firm transmission service across its electrical system. BPA agrees that wherever possible, electrical facilities should be in close proximity. As described in Section 2.4.5 of the EIS, for this project the location of the proposed Knight Substation is on a strategic point on BPA's existing Wautoma-Ostrander line just northwest of Goldendale. In order to gain the electrical performance needed to increase the capacity of the system, BPA's Big Eddy Substation needs to connect to this point along the Wautoma-Ostrander line.
- 10065-002 Please see the response to comment #10066-001 regarding the consideration of non-wire alternatives.
- 10065-003 Sections 3.1, 3.2, and 3.9 of the EIS describe the impacts of the proposed project alternatives to land use, visual resources, and socioeconomics, respectively.
- 10065-004 Please see the response to comment #10066-001 regarding the consideration of non-wire alternatives.
- 10065-005 Comment noted.
- 10065-006 BPA recognizes that wherever the line route is located it would impact someone's property and views; BPA has strived to balance electrical needs with project impacts to determine the best routes and facility locations.
- 10065-007 Thank you for your comments



SUBMITTED VIA E-MAIL

February 17, 2011

United States Department of Energy
Bonneville Power Administration
PO Box 3621
Portland OR 97208-9874

Re: Supplemental Information on the Draft Environmental Impact Statement for the Big Eddy-Knight Transmission Project

Dear Responsible Official:

Friends of the Columbia Gorge (Friends) previously submitted comments on the Draft Environmental Impact Statement on the Big Eddy-Knight Transmission Project. Friends also submitted multiple comments during the scoping process.

Friends has repeatedly requested that the BPA consider alternatives that would rely on conservation and efficiency measures instead of construction of new transmission lines. To date the BPA has not considered such alternatives for the Big Eddy-Knight Transmission Project.

Contrary to its actions on the Big Eddy-Knight Transmission Project, the BPA is studying conservation and efficiency alternatives in its review of the I-5 Corridor Reinforcement Project. The BPA's February 2011 Project Update for the I-5 Corridor announced that the BPA is considering a "non-wires" alternative based on analysis provided in a new report titled *I-5 Corridor Reinforcement Non-Wirings Alternatives Screening Study*. Prepared for the BPA by Energy+Environmental Economics (Jan. 12, 2011) (attached; available at <http://www.bpa.gov/corporate/I-5-EIS/index.cfm>). The Non-Wires Screening Report analyzes various conservation and efficiency measures, including consumer efficiency measures, demand response technology, and shifting where power is produced in the region when the grid is stressed. The Non-Wires Screening Report demonstrates that a conservation and efficiency alternative is, at the least, available for consideration during the NEPA process and should be considered for the Big Eddy-Knight Transmission Project.

522 SW Fifth Avenue, Suite 720, Portland, OR 97204 • (503) 241-3762 • www.gorgefriends.org
Printed on recycled, secondary chlorine-free paper

10066-001

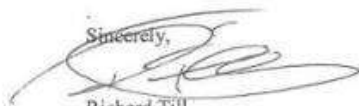
10066-001 Comment noted. As discussed in Section 2.6.1 of the EIS, BPA did consider conservation and efficiency measures as alternatives to the proposed project. However, because these measures would not address the need for action identified in Section 1.2 of the EIS (i.e., the need for additional electrical capacity in the project area to respond to requests for firm transmission service through the project area), these non-transmission alternatives were eliminated from detailed study in the EIS.

The commentor is correct that BPA currently is in the process of considering non-transmission alternatives for a separate BPA transmission line proposal, the I-5 Corridor Reinforcement Project (I-5 Project), which would be located in southwestern Washington in and near the Portland/Vancouver metropolitan area. BPA is continuing to investigate non-transmission alternatives for the proposed I-5 Project because the I-5 Project is primarily driven by the need to address location-specific transmission system stability and growing local power demands. In contrast to the firm transmission service requests that drive the need for the proposed Big Eddy-Knight Transmission Project, non-transmission alternatives may be a viable way of meeting the need for the proposed I-5 Project, so these alternatives are still being evaluated for the I-5 Project at this time. However, BPA is still in the process of preparing the draft EIS for the I-5 Project, which is not scheduled to be released until winter 2011/2012, and it is not yet known whether these non-transmission alternatives truly would be viable potential alternatives for the I-5 Project. Accordingly, it is unknown at this time whether non-transmission alternatives will be considered in detail in the EIS for the I-5 Project or whether these alternatives will be eliminated from detailed study in that EIS.

10066-001
continued

Friends requests that the BPA take official notice of the Non-Wires Screening Report as part of the administrative record for the Big Eddy-Knight Transmission Project environmental review.

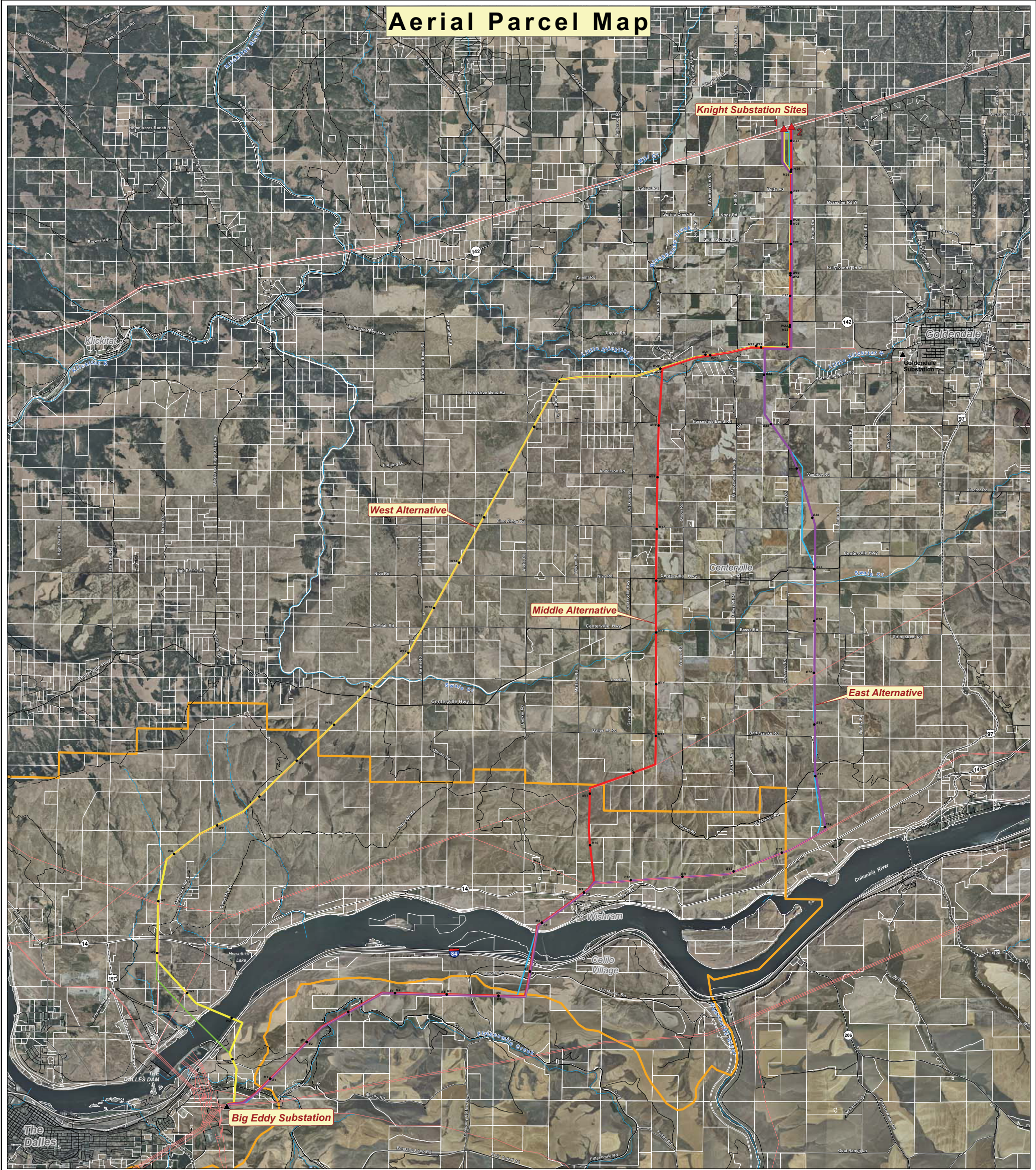
Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Till', is written over the word 'Sincerely,'.

Richard Till
Conservation Legal Advocate

Friends' Comments, Draft EIS for the Big Eddy-Knight Transmission Project
Page 2

End of responses for previous correspondence.



Big Eddy-Knight Transmission Project



Existing Facilities

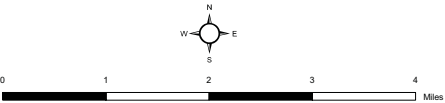
- BPA Transmission Lines
- BPA Substations

Proposed Facilities

- East Alternative
- Middle Alternative
- West Alternative
- Potential Route Adjustment, East Alternative
- Potential Route Adjustment, West Alternative
- Knight Substation Sites

Legend

- Columbia River Gorge National Scenic Area
- Property boundaries shown in white.
- Source: County Assessor; Klickitat, Wasco and Sherman Counties



Map date: 1/19/2011



Department of Energy

Bonneville Power Administration
P.O. Box 61409
Vancouver, WA 98666-1409

TRANSMISSION SERVICES

December 8, 2010

In reply refer to: TEP-TPP-3

To: Parties Interested in the Big Eddy-Knight Transmission Project

The Bonneville Power Administration (BPA) has completed a draft environmental impact statement (EIS) for our proposed Big Eddy-Knight Transmission Project. This letter includes information that will help you comment on the draft EIS, invites you to public meetings and outlines the project's next steps. Also enclosed are a factsheet that briefly describes the project and the draft EIS (if requested).

As you may know, BPA is proposing to construct a 500-kilovolt lattice-steel tower transmission line from our existing Big Eddy Substation in The Dalles, Oregon, to a proposed new Knight Substation about four miles northwest of Goldendale, Washington. The proposed project is needed to increase the electrical capacity of our transmission system so we can respond to requests for transmission service in the region. The project includes a new transmission line, substation facilities and a fiber optic cable.

Draft EIS

The draft EIS describes the proposed project and why it is needed, identifies BPA's preferred alternative, discusses the environmental impacts the project would create and lists the mitigation measures that would lessen or eliminate those impacts. We invite your comments on the draft EIS. Please let us know if we analyzed all the resources important to you. We would also like for you to tell us if there are other ways we could lessen potential impacts. We greatly appreciate your time reviewing the document and giving us your comments.

The draft EIS is available online at www.bpa.gov/go/BEK. If you requested a copy of the document, it is enclosed. If you are interested in receiving a hard copy (about 500 pages) or a compact disc with an electronic copy of the document, please call our toll-free document request line at (800) 622-4520. Please leave a message with the project name, your name, complete mailing address and phone number.

Public Meetings

You are also invited to two open house-style public meetings we are hosting on the project. Project team members will be available to take your comments on the draft EIS and answer any questions you may have. The meetings will be held at the following times and locations:

Tuesday, January 11, 2011

4 - 7 p.m.

Shilo Inn Suites Hotel - The Dalles
3223 Bret Clodfelter Way
The Dalles, OR 97058

Wednesday, January 12, 2011

4 - 7 p.m.

Goldendale High School
525 E. Simcoe Drive
Goldendale, WA 98620

In case of severe weather, please call 800-622-4519 to ensure the meeting has not been cancelled and rescheduled.

How to Comment

All comments on the draft EIS are encouraged. Comments will be accepted through **January 28, 2011**. Comments may be submitted online at: www.bpa.gov/comment, via mail to: Bonneville Power Administration, Public Affairs Office - DKE-7, P.O. Box 14428, Portland, OR, 97293-4428; or by fax to 503-230-3285. You also may call us with your comment toll free at 800-622-4519. Please reference "Big Eddy-Knight Transmission Project" with your comments. All comments will be posted in their entirety on BPA's Web site at www.bpa.gov/comment.

Next Steps

We will consider all comments submitted during the comment period. We will also continue to work with the Washington Energy Facility Siting Council and the Oregon Department of Energy, as well as with other federal, state, regional, and local agencies, tribes, landowners and interest groups.

All comments and our responses to comments will be published in the final EIS. The final EIS will include any changes to our proposal or analysis. BPA expects to complete and publish the final EIS in early summer 2011. We will then issue a record of decision in late summer 2011 that will explain BPA's decision about whether to build the project.

For More Information

BPA is committed to providing reliable, low-cost transmission products and services to the region while minimizing environmental impacts. If you have questions regarding the environmental process, please contact our environmental project lead, Stacy Mason, toll-free at (800) 282-3713, direct at (503) 230-5455, or e-mail at slmason@bpa.gov. If you have other questions or would like more project information, please call me, Steve Prickett, at the toll-free number above or directly at (360) 619-6379; or e-mail sprickett@bpa.gov.

For general project information, please visit our project Web site: www.bpa.gov/go/BEK.

Thank you for your interest in this proposed project.

Sincerely,

/s/ Steve L. Prickett

Steven L. Prickett
Project Manager

Draft EIS (if requested)
Factsheet



Fact Sheet

December 2010

Big Eddy-Knight Transmission Project Update

Draft environmental impact statement available for review

BPA is proposing to construct a 500-kilovolt lattice-steel tower transmission line from our existing Big Eddy Substation in The Dalles, Ore., to a proposed new Knight Substation about four miles northwest of Goldendale, Wash. We have completed a draft environmental impact statement for the project based on research, field review and public comment. We are asking for your comments on the draft EIS and invite you to public meetings. Your comments on the draft EIS will help us refine our environmental analysis. Please note that comments are due by Jan. 28, 2011.

Draft EIS

The draft EIS is a comprehensive document that explains the need for BPA to take action, describes the alternatives being considered in detail, as well as alternatives considered but eliminated from detailed study. The draft EIS also discusses the potential environmental impacts by alternative, and lists the mitigation measures that would lessen or eliminate those impacts.

Impacts to various resources were determined based on the footprint of transmission towers, access roads and Knight Substation. Impacts were also evaluated for construction areas and right-of-way easements, as well as long-term maintenance and operation of the project. Impacts are disclosed for the following resources:

- **Land use** – How the line could impact agricultural use, near-by residents, parks and conservation lands.
- **Visual** – How the line, roads and substation would affect views within the Columbia River Gorge National Scenic Area, and from homes and other sites in the rural environment, including views of Mt. Hood and Mt. Adams.
- **Vegetation** – Where the project would require the removal of or disturbance to trees, special-status plants and common vegetation communities and how the project could potentially introduce or spread noxious weeds.
- **Soils and Geology** – How the project would disturb soils, cause erosion and cross possible landslide areas.
- **Water Resources and Wetlands** – How sediment or shading water could affect streams and rivers crossed, and whether and where wetlands could potentially be filled.
- **Wildlife** – Where and how wildlife and their habitats could be disturbed and affected.
- **Fish** – How impacts to water bodies could affect fish.
- **Cultural Resources** – How possible historic or cultural sites along the project could be impacted.
- **Socioeconomics** – How having a new line in the area could have social effects, and what economic impacts could occur from construction jobs and spending, taxes, land use changes and property values.
- **Transportation** – What impacts would occur to the existing road system and from proposed access roads for the project.
- **Noise** – What noise levels would be generated during construction and line and substation operation.
- **Public Health and Safety** – A description of safety issues during construction, the potential for electric shocks and electric and magnetic field effects.



- **Air Quality** – How the generation of emissions and dust could impact air quality.
- **Greenhouse gases** – What emissions could contribute to greenhouse gases.
- **Cumulative Impacts** – How potential project impacts could add to other past, present and future impacts to various resources.

The EIS also describes the project's consistency with federal, state, regional and local regulations and with the National Scenic Area Management Plan.

The draft EIS is available online at www.bpa.gov/go/BEK.

Project description

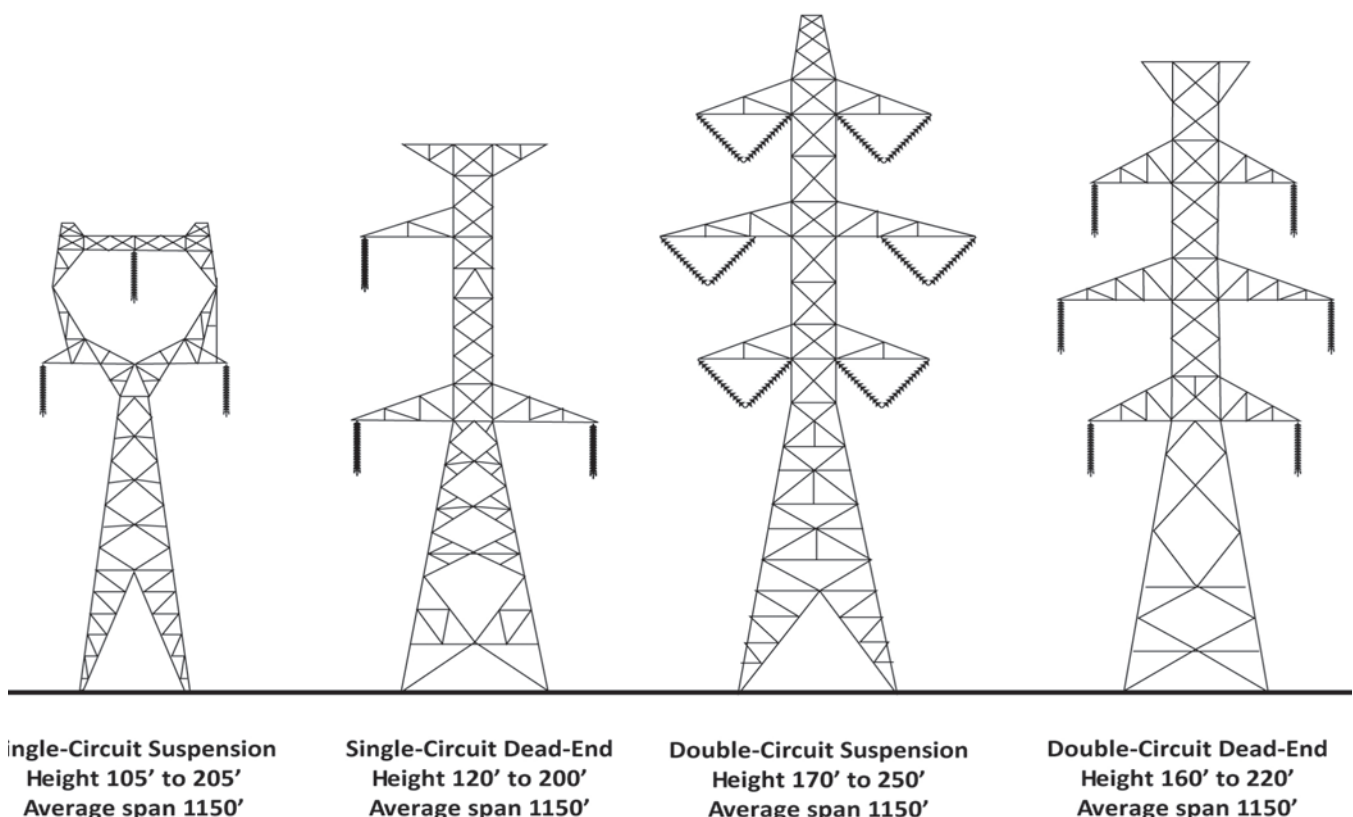
The proposed project is needed to increase the electrical capacity of the BPA transmission system so we can respond to requests for transmission service in the region. The project includes a new transmission line, substation facilities, and a fiber optic cable (see map). BPA is proposing three transmission line routes:

the West Alternative, Middle Alternative, and East Alternative, as well as the option to not build the line (the No Action Alternative).

All transmission line routes would begin at BPA's existing Big Eddy Substation. Additional equipment would be installed within the fenced substation yard. All routing alternatives would be approximately 28 miles long. Each proposes to use a combination of existing BPA transmission line right-of-way and new 150-foot wide right-of-way. Each alternative would cross the Columbia River and the Columbia River Gorge National Scenic Area, and would end at one of the proposed Knight Substation sites.

Where the proposed alternatives would parallel existing lines, there are options to build the proposed line adjacent to existing lines using single-circuit towers or to tear down existing lines and build double-circuit towers that could carry both lines. In general, single-circuit 500-kilovolt towers would be between 105 and 205 feet tall (depending on terrain). Double-circuit towers are about 50 feet taller than the single-circuit

Proposed Tower Types



towers, and would range from 170 to 250 feet tall. Tower heights would vary depending on the terrain, need for road and river crossings and other factors.

Two sites are being considered for the proposed new Knight Substation, which would require about 30 acres, with the fenced electrical yard covering about 10 acres. The sites are next to each other along BPA's existing Wautoma-Ostrander transmission line (see map). Site 1 is the most western site and is on private land. Site 2 is next to Site 1 and is on Washington Department of Natural Resources land.

BPA is considering two options for a fiber optic cable that would be required for communication between Big Eddy and Knight substations. A Loop Back Option would string fiber optic cable on the proposed transmission line towers from Big Eddy Substation to Knight Substation then loop back to Big Eddy Substation on the same towers. A Wautoma Option would follow the same route to Knight Substation but then continue an additional 72 miles on an existing BPA line through Yakima County, Wash., to BPA's Wautoma Substation in northwest Benton County (see map).

BPA's preferred alternative

The East Alternative is BPA's preferred alternative for the project. It proposes to use double-circuit towers where the line will be parallel to existing lines, Substation Site 1 and the Wautoma fiber optic cable option. Although these project components are preferred, we have not made a final decision. BPA will announce its final decision in a Record of Decision, expected in summer 2011.

Public meetings

We are hosting two open-house style meetings for the public to share their views about this proposed project:

The Dalles, Ore. – Tuesday, Jan. 11, 2011, 4 p.m. to 7 p.m., at the Shilo Inn Suites Hotel, 3223 Bret Clodfelter Way, The Dalles, Ore. 97058

Goldendale, Wash. – Wednesday, Jan. 12, 2011, 4 p.m. to 7 p.m., at the Goldendale High School, 525 E. Simcoe Drive, Goldendale, Wash. 98620

Project team members will be available to take your comments on the draft EIS and answer any questions you may have. You may stop by anytime during the open houses.

In case of severe weather, please call 800-622-4519 to ensure the meeting has not been cancelled and rescheduled.

How to comment

We invite your comments on the draft EIS. Please note that comments are due by Jan. 28, 2011.

Environmental Impact Statement Schedule

Winter 2010 - 2011

BPA issues draft EIS for public review and comment

January 11 and 12, 2011

BPA holds public meetings to receive comments on the draft EIS

January 28, 2011

Comments due for draft EIS

Early Summer 2011

BPA issues final EIS

Late Summer 2011

BPA issues Record of Decision announcing agency decision

Comments can be submitted online at: www.bpa.gov/comment; faxed to 503-230-3285; mailed to BPA's Public Affairs Office - DKE-7, P.O. Box 14428, Portland, OR, 97293-4428; or submitted via telephone toll-free at 800-622-4519. We will post a link to all comments we receive on the project Web site at www.bpa.gov/go/BEK.

If you received this factsheet in the mail, you are on our mailing list. If you would like to be added to the mail list, please call us toll-free at 800-622-4519 and leave your name, address and other contact information so we can include you in future mailings.

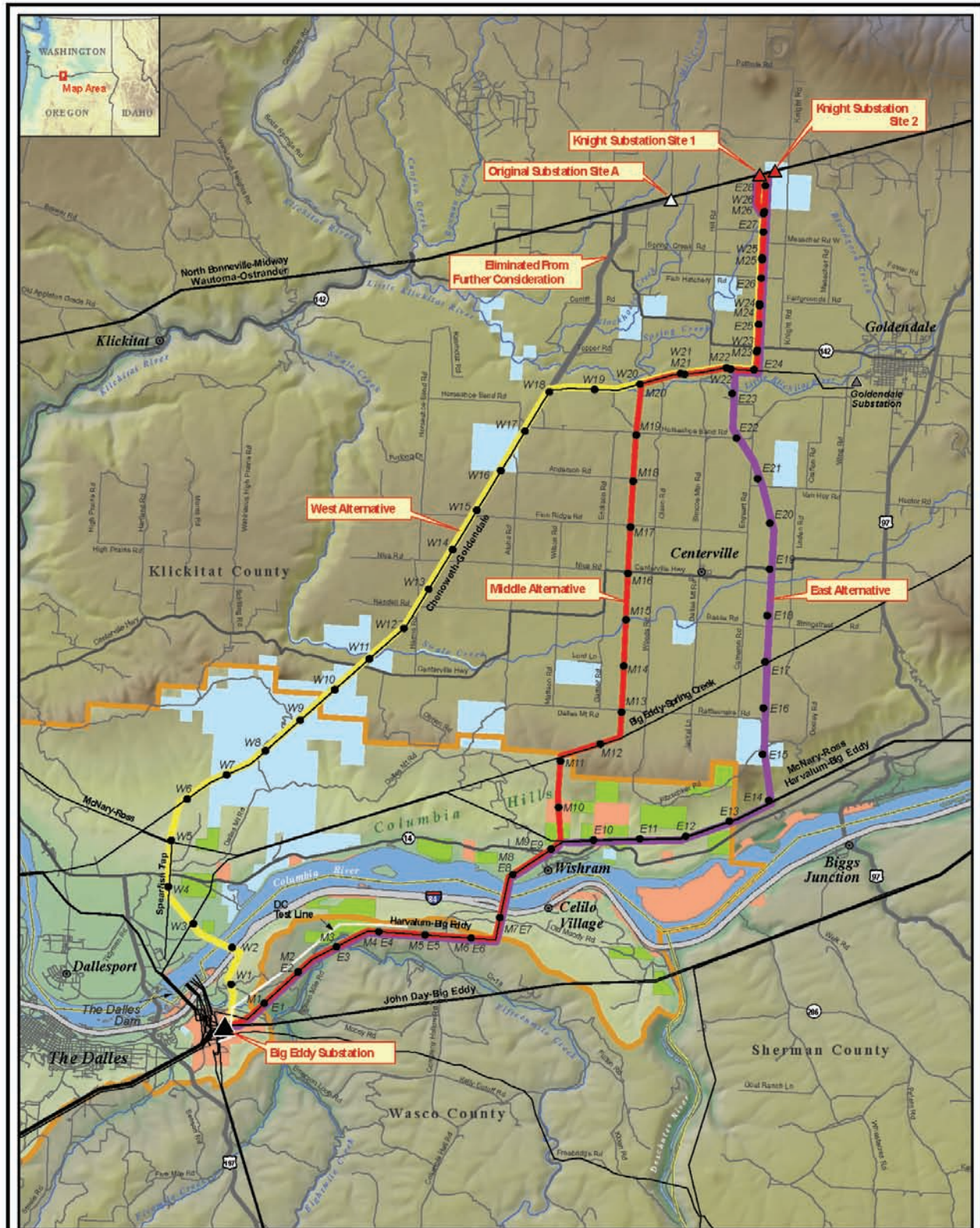
Please be sure to reference "Big Eddy-Knight Transmission Project" in all communications.

Next steps

We will consider all comments submitted during the comment period. We will also continue to work with the Washington Energy Facility Siting Council and the

Big Eddy-Knight Transmission Project Map

Wasco County, Ore. and Klickitat County, Wash.



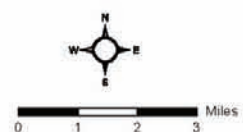
Existing Facilities

- ▲ BPA Big Eddy Substation
- ▲ Non-BPA Substation
- BPA Transmission Lines

Proposed Facilities

- West Alternative
- Middle Alternative
- East Alternative
- Eliminated From Further Consideration
- ▲ Knight Substation Sites
- ▲ Original Substation Site A
- Line Mile Markers

- Columbia River Gorge National Scenic Area
- Federal
- State
- Tribal Trust
- County Boundary



Oregon Department of Energy, as well as with other federal, state, regional and local agencies, tribes, landowners and interest groups.

All comments and our responses to comments will be published in the final EIS. The final EIS will also include any changes to our proposal or analysis. BPA expects to complete and publish the final EIS in early summer 2011 and then issue a record of decision in late summer 2011 that will explain BPA's decision about whether to build the project.

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 sprickett@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.

Big Eddy-Knight Fiber Optic Cable Overview Map

Wasco County, Ore. and Klickitat County, Wash.

