

Chapter 2 — Comments and Responses-DEIS

In this Chapter comments from:

- Federal Agencies
- State Agencies
- Local Agencies
- Tribes
- Groups and Individuals
- Public Meetings

Bonneville Power Administration (BPA) sent the Draft EIS (DEIS) to the public for comments on the Proposed Action and alternatives. The Draft EIS was distributed to agencies, groups, individuals, and libraries in June 2001. A 45-day public review period was extended to September 4, 2001 at the request of some commenters. A public meeting was held in Maple Valley, Washington on August 1, 2001 to review and receive comments on the Draft EIS. These comments were all captured and catalogued. As a result of the comments on the DEIS, BPA decided to analyze four additional action alternatives in more detail and to more fully explore non-transmission alternatives. Six additional scoping meetings were held to gather additional issues and concerns for the new alternatives in June 2002. BPA received over 1,600 comments during this additional scoping time. Since then, BPA has completed a supplemental draft environmental impact statement (SDEIS) for the proposed Kangley-Echo Lake Transmission Line Project. The SDEIS was released to the public for a 45-day review and comment period that ended on March 1, 2003. Five public meetings were held at various locations in King County during the week of February 3-6 to gather public comments on the SDEIS.

This chapter contains the written comments from letters, e-mails, and comment sheets received during the comment period for the DEIS and BPA's responses to those comments. It also contains the oral comments from the public meeting in August 2001 and telephone calls received during the comment period. Chapter 3 contains the written and oral comments received during the comment period for the SDEIS and BPA's responses to those comments. Letters and comment sheets were given numbers in the order they were received. Separate issues in each letter were given separate codes. For example, letter 394 might have issues 394-001, 394-002, and 394-003 identified within its text. Comments from the public meeting were also numbered. BPA prepared responses to each of these individual comments.

The chapter is organized in the following sequence: comments from **federal agencies** are followed by comments from **state agencies** (page 2-13), **local agencies** (page 2-17), **tribes** (page 2-107), then **groups and individuals** (page 2-115). Comments from the **public meeting** are at the end of the chapter (page 2-205). Because we have organized comments this way and often reference responses to other comments, please use the numerical list on the back of this page for reference. A listing of related comments by issue is at the end of the chapter on page 2-218.

(Comments on the DEIS begin with BPA log #338;
earlier letters were for scoping)

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Federal Agencies



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Western Washington Office
510 Desmond Drive SE, Suite 102
Lacey, Washington 98503
Phone: (360) 753-9440 Fax: (360) 753-9008

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-398
RECEIPT SEP 10 2001

SEP 04 2001

Gene Lynard
Project Environmental Lead
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

Re: Kangley-Echo Lake Transmission Line Project (FWS Reference #1-3-01-1-2032)

Dear Mr. Lynard:

This letter is in response to the final biological assessment (BA) for the Kangley-Echo Lake transmission line project and the Draft Environmental Impact Statement (DEIS). The review period for comments on the DEIS has been extended to September 4, 2001. The BA and accompanying letter requesting informal consultation was received in our office on July 23, 2001.

After reviewing the BA for this project, the U.S. Fish and Wildlife Service has concluded that we do not concur with the determination that the proposed action "may affect, but is not likely to adversely affect" the northern spotted owl.

The Service believes that the proposed action has the potential to adversely affect the northern spotted owl. The following outlines the basis for our determination:

398-001

1. The project will result in the permanent removal of mature forest habitat. The stands are currently potential foraging and roosting habitat for owls (>80 yrs old). Owls have been documented using forests of this age near the project location. Under the Seattle City Light Habitat Conservation Plan (HCP), these stands would have developed into potential nesting habitat in the near future.

398-002

2. The proposed action will degrade the quality of remaining owl habitat adjacent to the power line corridor. Widening the corridor may impact some smaller patches of forest to such an extent that they are completely affected by edge. The effects

398-001, -002, and -003 The trees that would be impacted do not currently have owls in them, and the Proposed Action would minimize the impacts to the extent practicable. BPA is using approved protocols to survey for spotted owls during the nesting period for the species. No owls have been found to date.

Adding all forest impacts together, the total still represents a very small percentage (1/10 of 1 percent) of that type of habitat that will remain available for spotted owl use within the HCP. BPA would mitigate for adverse impacts. BPA has consulted with USFWS on potential effects to the northern spotted owl, and will conclude that consultation prior to project construction. Additional information on consultation is found on page 5-2 of the SDEIS. An updated description of potential impacts to the northern spotted owl is found in Sections 4.7.2 and 4.7.3 of the SDEIS.

2-6 398-002 of the proposed action on interior forest habitat may impact the amount of suitable nesting habitat in the future.

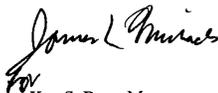
398-003 3. The project will widen the utility corridor by an additional 150 feet, effectively doubling the width of the opening along the 9 mile stretch. Research has documented that spotted owls are highly susceptible to predation by great horned owls, particularly when crossing openings.

398-004 The BA and DEIS did not adequately address the increased risk of predation to spotted owls and the long-term effects of having a large gap that dissects an otherwise intact watershed. The assessment and DEIS should include an analysis of the effects of the proposed action on interior forest habitat and the impacts of large openings on forest-dependent species, addressing both short and long-term (>50 years) impacts. This information will be used to evaluate effects and to quantify incidental take of spotted owls resulting from the project.

398-005 The DEIS should also include an evaluation of land parcels of similar value that could be acquired in order to mitigate for the permanent impact to habitat in the Cedar River Watershed (specifically lands included in Seattle City Light's HCP) caused by the proposed action. Replacing forest habitat lost as a result of the proposed action will minimize impacts to listed species.

398-006 While addressing the information needs listed above, we recommend that the Bonneville Power Administration request initiation of formal consultation for this project. When the information is received, formal consultation can be initiated. If you have any further questions, please contact Martha Jensen at (360) 753-9000 or John Grettenberger at (360) 753-6044.

Sincerely,



Ken S. Berg, Manager
Western Washington Office

cc: Jones and Stokes, Bellevue (H. Tate)
BPA, Communications, Portland

References

- Forsman, E., S. deStephano, M. Raphael, J. Gutiérrez. 1993. Demography of the Northern Spotted Owl. Studies in Avian Biology, No. 17. Fort Collins, Colorado.
- Forsman, E., E.C. Meslow, H. Wight. 1984. Distribution and Biology of the Spotted Owl in Oregon. Wildlife Monographs. The Wildlife Society.
- Gutiérrez, J. 1994. Changes in the Distribution and Abundance of Spotted Owls During the Past Century. Studies in Avian Biology, No. 15:293-300. Fort Collins, Colorado.

398-004 The Biological Opinion discusses the increased risk of predation to the spotted owl, and impacts to spotted owls were determined to be unquantifiable.

398-005 See response to Comment 340-002 for information about land purchased for compensatory mitigation. Site assessments that have been completed for some parcels have been given to SPU and the USFWS.

398-006 See response to Comments 398-001, -002, and -003.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
1200 Sixth Avenue
Seattle, WA 98101

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-411</i>
RECEIPT DATE: OCT 02 2001 00-047-BPA

Reply to
Attn. of: ECO-088

September 26, 2001

Lou Driessen, Project Manager
Bonneville Power Administration - KC-7
P.O. Box 12999
Portland, OR 97212

Dear Mr. Driessen:

The Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (EIS) for the proposed **Kangley-Echo Lake Transmission Line**. We are submitting comments according to our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA). Section 309 of the Clean Air Act directs the EPA to review and comment in writing on the environmental impacts of any major federal agency action.

BPA's preferred alternative proposes building a \$11.5 million, 500-kilovolt (KV), nine-mile transmission line near the community of Kangley in Central King County, parallel to an existing transmission line, then connecting with the existing Echo Lake substation. The Echo Lake sub station would be expanded by three acres to accommodate the new line at a cost of \$6.5 million. A total of 1.5 miles of new access roads would be built. One hundred fifty-two acres, including 84 acres of mostly Douglas fir, would be impacted by the project, which includes a 150-foot cleared right-of-way. The new line will improve system reliability in King County and enhance the delivery of power to Canada, required under the Columbia River Treaty of 1961.

BPA has said that under normal growth in demand, system instability could develop as early as the winter of 2002-2003. An outage on the existing line between Raver and Echo Lake substations could overload transformers in the Covington area during heavy use. According to the EIS, the amount of energy saved through conservation programs is not enough to defer the need for a new transmission line.

Four other alternatives (2, 3, 4A and 4B) are located east of the existing transmission line, requiring new rights-of-way and access roads. Alternative three requires the most new access roads, 6.4 miles, because the route is not next to an existing transmission line or right-of-way. All five options cross the Cedar River and the Cedar River Watershed.

Based on our review, we have rated this draft (EO-2) Environmental Objections - Insufficient Information. This rating and a summary of our comments will be published in the *Federal Register*.

411-001

411-001 Comment noted.

411-002 BPA disagrees with EPA over its assessment that the DEIS provides no information about the proposed project's impacts to the Cedar River Municipal Watershed. Chapter 4, Environmental Consequences, identifies impacts for each of the 14 resources identified, including the short-term impacts (construction), and long-term impacts (operation and maintenance). With regard to the City's newly adopted HCP, BPA disagrees with the EPA's assessment that the project "does not appear to comply" with the HCP, which allows no logging within the watershed. The City of Seattle's HCP for the Cedar River Municipal Watershed is a plan between the signatories, i.e., between the City of Seattle and the U. S. Fish and Wildlife Service and the National Marine Fisheries Service. The plan covers only actions by the City of Seattle, and does not disallow all logging within the watershed, only "commercial logging."

BPA's purpose is not to commercially log merchantable timber within the Cedar River Municipal Watershed, only to clear a right-of-way to construct a high voltage transmission line between the existing Shultz-Raver No. 2 Transmission Line near the community of Kangley and connect the line to the existing BPA Echo Lake Substation, nine miles north of the tap point. Removing trees to safely construct, operate and maintain the proposed transmission is incidental to constructing the power line. To replace the 1/10 of one percent of the forested habitat that would be converted to non-forest uses within the 90,546-acre Cedar River Municipal Watershed, BPA would acquire other lands that would be conveyed to SPU's landholdings to mitigate for this loss of forest habitat. See response to Comment 340-002. Additionally, BPA would undertake mitigation within the CRW to mitigate for altering forested wetlands and converting them to scrub/shrub wetlands.

Major Concerns

411-002 The EPA has serious concerns about the DEIS's adequacy. The draft provides no information about the transmission line's impacts to the Cedar River Watershed, the region's major drinking water supply and a source of water to 1.3 million people. The project does not appear to comply with the city of Seattle's Habitat Conservation Plan (HCP), which allows no logging within the watershed. The HCP also addresses Endangered Species (ESA) and natural resource issues. The city of Seattle has stated in a letter to BPA that "Seattle Public Utilities (SPU) will not accept any need to modify the HCP as a consequence of BPA's activities."

411-003 The language in the draft is confusing and contradictory. As an example, (summary, page 11) "Each of the alternatives would cross some fish-bearing streams. The fish resources in the study area include resident and anadromous species." However, another statement on the same page says, "Both chinook salmon and bull trout are potentially, though not likely, present in the streams crossed by each of the action alternatives." BPA should know this information and state it in the DEIS.

Purpose and Need and Range of Alternatives

411-004 We recommend that the purpose and need statement be presented briefly, specifying the need for the project (40 CFR 1502.13). Describe the need in one or two sentences. Then, if needed, to establish a contextual setting for the project, follow the need statement with a separate, in-depth background discussion. Avoid putting a laundry list of objectives in the purpose and need statement itself. Instead, discuss these other objectives later in the purpose and need section as additional benefits to be derived from the project.

411-005 The DEIS says that BPA will use four purposes to choose among the alternatives, including maintaining environmental quality, and minimizing impacts to the human environment through site selection and transmission line design. Please explain how environmental quality can be maintained when the proposed project, as well as the four other alternatives, go through a watershed.

411-006 We are concerned with constraints on alternatives because of the Purpose and Need statement. Chapter 2, pages 17 and 18, briefly discusses alternatives considered but eliminated. One alternative was dropped because the transmission line couldn't be taken out of service long enough to be rebuilt, and two others were dropped because of costs. The range of alternatives should be expanded to include a route around the west side of the Cedar River Watershed through the communities of Hobart and Ravensdale. BPA eliminated this route due to land costs and impacts to residents.

411-007 Question 2A in NEPA's Forty Most Asked Questions states that "section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope

411-003 These sentences have been changed to clarify the information and additional information was included in the SDEIS.

411-004 Comment noted.

411-005 Environmental quality includes both the natural environment and the built environment, together with the human environment. To maintain the environmental quality in a region, the health of the natural environment and the built environment needs to be protected. BPA is the federal power-marketing agency that markets power generated at federal dams and a nuclear power plant in the Northwest. This power is sold to public and private utility customers and direct service industries throughout the area. Electric power is needed by all modern societies to maintain and promote economic health of an area as well as to maintain human health and safety. BPA provides this public service as required by law, while minimizing any disturbance to the natural environment and meeting all applicable federal, state and local laws and regulations.

411-006 In response to this and other comments on the range of alternatives in the DEIS, BPA analyzed four alternatives outside of the CRW and explored the non-transmission alternatives in more detail in the SDEIS. See pages 2-20 through 2-52 of the SDEIS.

411-007 See response to Comment 411-006.

411-008 The EIS does clearly say what fish are thought to use each stream, and cites a relevant authority for each. Most of these fish distribution data are based on information in published databases, which are based on surveys by WDFW, King County and Seattle biologists. However, a detailed field survey is required to conclusively identify whether a stream is or is not occupied by a given species. We believe that such surveys are unnecessary for the purposes of this analysis. This is because the analysis presented in the DEIS assumed that all salmonids potentially present in each stream were in fact present, and impacts were evaluated in accordance with that assumption. Moreover, the act of performing those surveys would itself have a potentially high impact.

411-007 of alternatives to be considered, the emphasis is on what is “reasonable” rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include 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.”

Environmental Consequences

BPA needs to clarify several statements in the Final EIS (FEIS) in the Environmental Consequences chapter.

- 411-008 ♦ The description of impacts to fisheries (Chapter 4-22) is confusing. According to the EIS, “Impacts would be greater in streams occupied by threatened, endangered, or sensitive species than if the streams were not occupied by such species.” The FEIS needs to say whether these streams have these species, and, if so, discuss whether the habitat will be degraded by these impacts. Please identify which streams have salmon species.
- 411-009 ♦ The proposed action would clear vegetation from more than a half mile (2,900 feet) of a potentially fish-bearing stream within the right-of-way (ROW). Please state whether this stream is fish-bearing or not, and clarify the amount of clearing to be done. Page 26 of the appendix says that the amount of clearing can’t be confirmed at this time. The draft EIS (Ch. 4-36) says that impacts on stream temperatures are expected to be low because of the small area to be cleared. The EPA recommends that the FEIS include precise information on the extent of clearing necessary and discuss the cumulative impacts on soils and stream temperature (40 CFR 1508.25 (a) and (c)).
- 411-010 ♦ The BPA needs to clearly state which of three standards it intends to follow for protection of riparian and fisheries resources. In a discussion about removal of riparian vegetation, (Ch 4-25), the EIS names three regulatory standards approved by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service to ensure compliance with the Endangered Species Act (ESA). The standards are the Cedar River Watershed Habitat Conservation Plan (HCP) for the city of Seattle, the Washington Department of Natural Resources HCP and the Washington Forest Practices Rules. Depending on the type of stream, each standard differs on the width of buffers from streams.

411-011 Please clarify two statements about future transmission lines in the area. In the DEIS, (Chapter 2-14) says, “The No Action Alternative does not mean there would never be a need for future transmission projects, only that no line would be considered for construction in this general area in the near future.” However, in Appendix D, the Final Wetlands Technical Report, Page 22 under Cumulative Impacts says, “In the future, the transmission line ROW would be a logical choice for construction of other linear projects, including additional transmission lines, fiber optic cables, or pipelines. The decision to create a new corridor in this area could increase the likelihood of such proposals.”

411-009 The environmental analysis assumes that all streams that would be crossed are fish-bearing. Tall-growing vegetation would need to be cleared in the proposed right-of-way, including the riparian area of Deep Creek. Low-growing vegetation would be planted in the riparian area of Deep Creek to mitigate for the vegetation cleared to the extent possible.

411-010 In siting its transmission facilities, BPA uses information from the environmental process. It first tries to avoid sensitive resources. Where these resources cannot be avoided, the impacts are minimized. As for its purpose, BPA builds major electrical transmission facilities, i.e., high voltage power lines and substations and switching stations. Transmission lines, by necessity, are linear facilities, and as such have difficulty avoiding all sensitive resources, many of which are also linear in nature such as streams, and their associated riparian and wetland areas. BPA recognizes that local, state and federal agencies have adopted standards to protect sensitive areas, and BPA does meet these standards to the extent that it can. BPA would do so, however, only after designing its facilities to meet the National Electric Safety Code, and its own clearing criteria, so that it could safely and reliably construct, operate and maintain its electrical transmission system.

411-011 It is true that selection of the No Action Alternative at the conclusion of the environmental process does not mean that there would never be a need for future transmission projects, only that no power line would be considered in the general area in the near future. It is also true that the presence of any existing utility facility would be a logical choice for the siting of future proposals.

411-012 | Additionally, Ch.2-21 says that under the no action alternative there would be a high impact due to potential for transmission system collapse, brownouts and blackouts affecting a widespread Northwest population. It further states that a delay of the system expansion could mean higher future costs. The EPA recommends that these costs be explored and stated in the FEIS.

Protection of Listed Species and Their Habitats

411-013 | Several special status species, including the threatened chinook salmon and bull trout, under the Endangered Species Act (ESA) are “potentially” present in the streams crossed by each of the action alternatives. Three other species potentially in the streams include the Pacific lamprey and the river lamprey, (USFWS species of concern), and Coho salmon, a candidate for listing. In a separate ruling, the National Marine Fisheries Service (NMFS) also designated critical habitat for the chinook salmon, including all surface water accessible to the chinook, and riparian habitats necessary to support those surface waters.

411-014 | Other listed species known to occur within the project area are the northern spotted owl, northern goshawk, black swift, merlin, olive-sided flycatcher, and pileated woodpecker. Five species of bats potentially occur in the area.

411-015 | Please disclose the results of biological assessments and opinions (40 CFR 1502.25 (a)) in the FEIS. By doing this, the FEIS would demonstrate that the Endangered Species Act (ESA) procedures are being followed and that any listed species is being protected.

Water Quality

According to the EIS (Ch.4-17), the transmission line will cross the Cedar River, Rock Creek and three small tributaries of Rock Creek, the Raging River and two tributaries of the Raging River. At Rock Creek and its tributaries, the right-of-way clearing may remove all trees, exposing the creek to more direct sunlight, possibly causing a slight increase in water temperature.

411-016 | The antidegradation requirement under the Clean Water Act (CWA) applies to those streams where water quality standards are presently being met. These provisions prohibit degrading the water quality unless an analysis (which involves a public process) shows that important economic and social developments necessitate degrading water quality. The Washington State Department of Ecology (DOE) must be satisfied with the analysis and grant permission to lower, but not violate water quality. Please discuss how you will be in compliance with the antidegradation requirement.

Other Concerns

411-017 | **Roads:** BPA states that “precise road locations have not been defined.” (Ch.2 -7)

411-012 | BPA simply made an observation here that facilities “in the future” generally cost more than things have in the past, and that this is generally true for such things as land, materials and labor.

411-013, -014, and -015 | BPA did prepare a biological assessment (BA) and submitted the document to the USFWS and the NMFS in July 2001. The USFWS has indicated to BPA that it could not concur in BPA’s finding that the Proposed Action “May affect, but is not likely to adversely affect the northern spotted owl.” As a result, BPA has prepared an addendum to the BA, addressing the FWS additional request for more information and submitted this information to the FWS along with a request to enter into formal consultation with them on this issue.

In January 2002, NMFS sent a letter to BPA concurring with its effect determination of “may affect, but not likely to adversely affect” for Puget Sound chinook and their designated critical habitat. This letter notified BPA that the NMFS was concluding section 7 consultation with BPA in accordance with 50 CFR 402.14 (b)(1). See Appendix U of the SDEIS and of the FEIS for copies of letters from NMFS. BPA’s BA covered the impacts of the Proposed Action on federally-listed and candidate species only; therefore, a number of species listed in your letter were not addressed. These include the Pacific lamprey, river lamprey, northern goshawk, black swift, merlin, olive-sided flycatcher the pileated woodpecker, and five species of bats.

411-016 | A number of mitigation measures designed to limit potential impacts to stream water quality are described in Sections 4.4.2.1 and 4.5.3.1 of the SDEIS. For example, where the line crosses the Cedar River (a public drinking source), BPA would double circuit the towers on either side of the river. This would avoid the need to do any clearing of vegetation within about 600 feet of either bank of the river. We are also avoiding filling any waters, including wetlands. BPA firmly believes that the designated use of the streams the project crosses will retain their designated uses. We do not anticipate that a use attainability analysis, the analysis you refer to, will have to be undertaken to change the designated use or water quality criteria for any streams in the project area. In short, we believe the project would comply with the state’s anti-degradation policy.

411-017 However, the DEIS says that topographic maps, satellite images and ground reconnaissance were used to predict miles of new access roads. With these data sources, BPA should be able to define where roads will be built. The DEIS also states that new and existing access roads may cross streams, but that no bridges would be built (Ch.2-8). If not bridges, please identify in the FEIS what type of structures would cross streams and rivers.

411-018 **Cultural resources:** The FEIS should include details on tribal concerns (Muckleshoot, Snoqualmie and Sauk-Suiattle) about the impacts to cultural resources in the project area. None of the previously recorded cultural sites occur on or near (within 700 feet) of the project area, according to the DEIS. However, (Ch. 4-95) states that "there is a high probability of encountering prehistoric and historic cultural resources in the project area.

411-019 **Hazardous spills:** SPU says that no hazardous spills are acceptable in the watershed. The DEIS said that BPA would develop a spill prevention and contingency plan to avoid spills of hazardous materials in the watershed. However, that information should have been in the draft and needs to be in the FEIS.

Thank you for the opportunity to review this draft EIS. Please contact Val Varney (206) 553-1901 if you have any questions.

Sincerely,

Judith Leckrone Lee, Manager
Geographic Implementation Unit

411-017 Section 2.1.1.5 of the SDEIS was updated to include the most current information about access roads.

411-018 The commenter is correct, the DEIS does state this. Since the release of the DEIS, our cultural resources consultant completed a detailed survey of the project area. Also, the Muckleshoot Tribe Culture Committee representatives have indicated to BPA that they would like to have a cultural monitor to be present whenever any ground disturbing activities would take place associated with project activities. We will comply with this request.

411-019 BPA is working with SPU on the Storm Water Pollution Prevention Plan (SWPP). It will be completed and reviewed before construction if BPA decides to build Alternative 1. Additional information about the SWPP was included in the SDEIS.

State Agencies



RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-390</i>
RECEIPT DATE: SEP 04 2001

August 23, 2001

Communications
Bonneville Power Administration-KC-7
P.O. Box 12999
Portland, OR 97212

RE: Kangley-Echo Lake Transmission Line Project

Dear Sir,

Thank you for the opportunity to comment on this project. We have the following comments to the Draft Environmental Impact Report for the Kangley-Echo Lake Transmission Line project DOE/EIS-0317.

DNR state lands has the following comments:

The environmental analysis must address both existing and proposed Bonneville Power Administration (BPA) power lines:

390-001
390-002

1. Construction, maintenance, abandonment of power line roads and towers as they relate to Clean Water Act and the Endangered Species Act (ESA); must address existing conditions on all BPA facilities in the study area
2. Management of nonnative plants within power line corridors.
3. The Department requests that any public lands should be replaced, acre for acre, with additional forest lands.

DNR regulatory has the following comments:

390-003

1. A forest practice application is required.
2. The landowner(s) must sign the application.
3. Harvest and road construction on forest land, as defined in WAC 222-16-010, must comply with the Forest Practice Act WAC 222.
4. Harvest and or road construction on potentially unstable slopes as defined in WAC 222-16-050(1)(d) must include a qualified expert report as described in WAC 222-10-030.
5. Road maintenance and abandonment plan(s) may be required.

Please feel free to contact Kit Metlen concerning comments from state lands of myself concerning regulatory comments at 360-825-1631. Thank you for considering these comments. We look forward to continued participation in this project.

Sincerely,

Susan Casey
Forest Practice Coordinator

c.SEPA center #020778
Kit Metlen – State Lands Assistant SPS Region

390-001 Comment noted. The DEIS prepared for the proposed project contained Chapter 3, Affected Environment. This chapter describes the existing environment (conditions) that may be affected by the project alternatives.

390-002 Please see response to Comment 382-017.

390-003 Comment noted. Should a decision be made to build the line, BPA would purchase the land rights from the Department of Natural Resources to build that portion of the project that would cross state land, however, BPA would not replace public lands in addition to the land rights that would be acquired. The state could, if it chose, use the funds obtained from BPA to acquire the easement for the purpose of acquiring additional lands. This decision would be left to the Department of Natural Resources.

See also response to Comment 340-002.

BPA will strive to meet the substantive standards and policies of the Washington Forest Practices Act wherever possible. BPA and the Washington DNR have agreed that BPA is exempt from acquiring a FPA permit when BPA documents that its easements create federal ownership of the timber. As such, BPA will not be securing a FPA permit for this project. BPA will meet the applicable water quality standards for road construction.



Local Agencies



City of Seattle

Paul Schell, Mayor

Seattle Public Utilities
Diana Gale, Director

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG# <u>KELT-394</u>
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September 4, 2001

Seattle Public Utilities
Dexter Horton Building, 10th Floor
710 Second Avenue
Seattle, Washington 98104

Lou Driessen, Project Manager
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

SUBJECT: Comments for the Draft Environmental Impact Statement (DEIS) for the Kangley-Echo Lake Transmission Project

Sent via e-mail to: comment@bpa.gov

Dear Mr. Driessen:

Seattle Public Utilities (SPU) is responsible for providing drinking water to 1.3 million customers in the urbanized areas of western King County and southern portion of Snohomish County. SPU takes approximately two-thirds of its drinking water from the Cedar River. SPU owns the 90,546-acre Cedar River Municipal Watershed (CRW) and manages its land and aquatic resources for water supply, the protection and restoration of fish and wildlife habitat, and the protection of cultural resources. SPU's companion utility, Seattle City Light, owns and operates a hydroelectric facility and associated transmission lines in the watershed. City Light will provide comments on the DEIS under separate cover.

This letter provides Seattle Public Utilities' (SPU) comments on the Draft EIS for the Kangley-Echo Lake Transmission Project. SPU provided comments during the scoping for this project in letters to BPA dated April 28 and October 2, 2000. Because the DEIS fails to address SPU's scoping comments, these are repeated in the appropriate sections of this letter. All of SPU's comments should be understood in the proper context: the CRW is a unique and vital resource for the citizens of Seattle and the region. This area is currently being managed to protect a safe, unfiltered source of drinking water and to protect numerous wildlife species and their habitat.

SPU considers this DEIS to be inadequate because it: 1) contains significant NEPA-procedural deficiencies, including what appears to be a lack of full-disclosure of environmental impacts; 2) fails to include important Endangered Species Act (ESA)-related analysis, coordination, and mitigation; 3) lacks commitments to compensatory mitigation; 4) fails to acknowledge the unique long-term habitat protection status provided by the HCP and to recognize the increasing regional biodiversity value of the habitats it proposes to impact; and 5) fails to appropriately acknowledge the significance of the CRW as the water

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Watershed Management Division, 19901 Cedar Falls Rd. S.E., North Bend, WA, 98045
Tel: (206) 233-1510, Fax: (206) 233-1527

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394-001 BPA acknowledged these concerns and prepared a SDEIS, which was released in January 2003.

394-001

BPA Kangley—Echo Lake DEIS
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supply for 1.3 million people. We request that BPA issue a Supplemental DEIS (along with the associated public comment period) that corrects these serious flaws, clearly and accurately assesses the true environmental impacts of this project, and is compliant with NEPA regulations and guidance.

SPU has the following comments on the DEIS. Five separate attachments to this cover letter are included in this submittal. The first attachment contains general comments on the DEIS followed by specific comments on the DEIS. Each of the subsequent four attachments provide comments on each of the four BPA DEIS technical appendices (A, Fisheries; B, Wildlife; C, Vegetation; and D, Wetlands). Because the DEIS is largely a distillation of its technical appendices, SPU's comments on the technical appendices will also apply to the DEIS. In addition, there is much boilerplated text used in the DEIS and its appendices. To minimize redundancy, SPU has attempted to comment only once in such cases, but those comments would apply to other documents for which the comments are relevant.

If you have questions or require further information, please contact Jim Erckmann at (206) 233-1512 or Clay Antieau at (206) 233-3711. Regarding cultural resources, please contact SPU's staff archaeologist, Tom Minichillo at (206) 233-0032.

Sincerely,

SIGNATURE

Suzanne Flagor
Director
Watershed Management Division
Seattle Public Utilities

Attachments:

- 1) SPU comments on BPA DEIS
- 2) SPU comments on BPA DEIS Appendix A (Fisheries)
- 3) SPU comments on BPA DEIS Appendix B (Wildlife)
- 4) SPU comments on BPA DEIS Appendix C (Vegetation)
- 5) SPU comments on BPA DEIS Appendix D (Wetlands)

cc: Dennis Anderson, Muckleshoot Indian Tribe
Maria Cantwell, U.S. Senate
Craig Hansen, USFWS
Hardev Juj, Seattle City Light
Steve Landino, NMFS
Patty Murray, U.S. Senate
Seattle Mayor Paul Schell
King County Executive Ron Sims
Val Varney, EPA

Kangley-Echo Lake Transmission Line Project DEIS

**Seattle Public Utilities' Response
August 30, 2001**

GENERAL COMMENTS (GC)

GC-1: The "purpose and need" for the proposed project is neither substantiated nor clearly defined.

394-002 There is no explanation of the electrical transmission system serving the King County area that supports the necessity of the proposed line. Instead, the DEIS asserts without substantiation that this specific line is necessary to maintain system reliability. At a minimum, system plans or a regional analysis should be referenced, along with a description of other improvements BPA is considering in the near and distant future so the reader can understand why this specific (and relatively small) link in a much larger system is necessary. In SPU's conversations with BPA staff, it has also been unclear if the need to construct a redundant transmission line for system reliability and the relative location of that line are legal requirements or policy choices. The legal and policy contexts of the project should be clearly distinguished in the DEIS.

394-003 Furthermore, the "purpose and need" is the basis for defining alternatives. NEPA only requires that reasonable alternatives be considered. "Reasonable alternatives," however, include those alternatives that can meet the objectives (as defined by the purpose and need) of the proposal. Without a clearly defined purpose and need, the range of reasonable alternatives is very large—much larger than the range of alternatives considered in the DEIS (see General Comment 2, below).

GC-2: The range of alternatives evaluated in detail is too narrow.

394-004 The DEIS does not provide sufficient analysis of alternatives outside of the Cedar River Watershed to support their elimination without detailed evaluation. The DEIS cites impacts to "developed land and people living in the area." The potential for these impacts is obvious, but without further explanation there is no support for dismissing these alternatives just because they would have impacts. All of the alternatives included in the DEIS also have impacts, and yet they were not dropped from consideration. Without criteria and explanation, there is no justification for dropping certain alternatives and narrowly limiting the range of alternatives considered in the DEIS. The DEIS should evaluate the range of reasonable alternatives. This type of comparison of alternatives and impacts to the built and natural environments is precisely what an EIS is supposed to provide. Dropping certain alternatives due to cost concerns needs to be supported by detailed cost justifications presented in the DEIS.

394-005 Further, NEPA requires that federal agencies consider alternatives that can accomplish the objectives of the proposal, but at a lower environmental cost. This includes considering mitigation measures that could avoid or reduce impacts of the proposed action. The DEIS is silent on the most common types of mitigation measures that could address some of the high and significant impacts that would result from the proposed action (see General Comment 9).

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394-002 BPA performed a regional system analysis that supported the need for the project. This joint study was coordinated with Seattle City Light, Snohomish County PUD, Tacoma City Light and Puget Sound Energy. BPA also received letters of support stating the project is the right choice from Seattle City Light, Tacoma City Light and Snohomish County PUD. The technical studies that are part of the analysis include computer simulations of projected power flow. (See SDEIS Appendix H, available on request.) The DEIS did contain the salient issues with regard to why this project is needed.

Other improvements BPA is considering in the area are: a new 230/500-kV transformer at Sno King Substation; and system additions at Bothell, Monroe, Sno King and Snohomish substations. In addition, the need for a 500-kV transmission line from Echo Lake Substation north to Monroe Substation is being studied. No decision about this project has been made. These projects are proposed in response to growing Puget Sound area load and the Treaty return to Canada. Also see Section 1.2.1 and Appendix M of the SDEIS and the response to Comment 1942-006.

394-003 The description of the purpose and need for the project is greatly expanded in Chapter 1 of the SDEIS.

394-004 See response to Comment 411-006.

394-005 Comment noted.

GC-3: The description of alternatives is insufficient to support evaluation of impacts or mitigation measures.

Several key aspects of the proposed transmission line are not described in sufficient detail to support an evaluation of impacts, even though these details may have been known at the time of the issuance of the DEIS (as evidenced by the issuance of BPA's Final Biological Assessment for this project during the public comment period for the DEIS). For example, the DEIS description of clearing requirements, tower locations, and access roads is general and vague. This information is critical to understanding potential impacts because in many aspects the alternatives are reported to have very similar impacts. For example, the difference in vegetation affected by the alternatives 1 and 2 is less than two percent. Given the uncertainty regarding the project, the difference may or may not actually exist. The importance of clearing is supported by the DEIS, which describes removal of trees on the Cedar River as "high" impact (p. 4-36).

Failure to adequately describe the project compounds the vagueness of proposed mitigation measures, making it impossible to evaluate the effectiveness of mitigation. The net result is a level of uncertainty of the proposal's impacts that significantly reduces the usefulness of the DEIS to reviewers and decision-makers. The fact that specific, known design information for the proposed action was omitted from the DEIS indicates this DEIS does not fully disclose environmental impacts. The fact that BPA issued a Final Biological Assessment (BA) for this project during the public comment period for the DEIS indicates that BPA failed to provide full-disclosure of project impacts. The BA contains specific, known design information (for the proposed action) that is not included in the DEIS. SPU does not expect a proposed action to be fully designed for purposes of environmental impact assessment. However an EIS either needs to commit to specific project details or evaluate all reasonable approaches to those components of the proposed action.

The landowner most affected by this project is the City of Seattle, and the impacts of the project are potentially greatest and certainly most complex for the Cedar River Municipal Watershed (CRW), especially considering 1) the area is the region's major drinking water supply, and 2) the land is being managed under a complex Habitat Conservation Plan (HCP) and associated legal commitments to the federal government. However, BPA's proposed actions and their impacts are described so minimally that it is not possible for the City or the public to evaluate project impacts. Simply stated, the DEIS does not fully disclose environmental impacts. In addition, the DEIS contains numerous inconsistencies among analysis assumptions, as described elsewhere in this comment letter. The reader is not able to effectively evaluate impacts of the proposed actions for all disciplines because sufficient project information is missing, the DEIS contains conflicting analysis assumptions, and BPA does not commit to specific design/construction specifications.

GC-4: Specific information related to project impacts will only be provided in the Final EIS and therefore not subject to public review and comment.

Information on clearing requirements in the CRW (p. 2-6) and access roads (p. 2-7) is not provided in the DEIS, but instead notes the information will be available for the Final EIS. This information is critical to evaluating project impacts and mitigation measures and therefore should be provided as part of the DEIS. Also, the DEIS does not describe tower locations, which would have substantial impacts. Again, the fact that specific, known design information for the Proposed Alternative was omitted from the DEIS indicates this DEIS does not fully disclose environmental impacts. Again, the Final BA for this project contains specific, known design information (for the proposed action) that is not included in the DEIS. The fact that specific, known design information for the proposed action was omitted from the DEIS indicates this DEIS does not fully disclose environmental impacts. The fact that BPA issued a Final BA

394-006

394-007

- 394-006 Comment noted. Information that has become available since the DEIS was published was included in the SDEIS. The Proposed Action is described in more detail in Section 2.1 of the SDEIS, including a variety of mitigation measures. Design information used for the biological assessment was not available when the DEIS was being produced. BPA typically uses site-specific information and information gained from past transmission line development to estimate and fully disclose potential impacts.
- 394-007 Please see response to Comment 394-006.
- 394-008 BPA has submitted a consistency determination under the Coastal Zone Management Act to the Washington Department of Ecology. The Department of Ecology concurred with BPA's determination that the proposed project was consistent with the Coastal Zone Management Act. See Section 5.11.2 and Appendix V of the SDEIS.
- 394-009 BPA intends to provide compensatory mitigation for project impacts, including permanent protection of adjoining lands. Please see response to Comment 340-002. The USFWS and NMFS have assessed the proposed project's impacts on the HCP and have concluded that the HCP will retain its value and function (see Appendix U and Appendix AA of the FEIS).
- 394-010 On March 16, 2001, BPA met with representatives of federal agencies with ESA jurisdiction (USFWS and NMFS) to discuss the purpose and need for the project, alternatives considered, potential impacts and NEPA and HCP processes. A SPU representative was present at this meeting. BPA prepared a biological assessment to evaluate the potential effects of the Proposed Action on listed and candidate threatened and endangered species, and designated or proposed critical habitat. The BA was prepared pursuant to the final rules for interagency cooperation under the Endangered species Act (ESA) (50 CFR 402.12; June 3, 1986). BPA initiated formal consultation with the USFWS on the northern spotted owl. NMFS has concurred with BPA's determination that there will not be any adverse impacts to federally-listed anadromous fish (see Appendix U of the SDEIS and FEIS).

for this project during the public comment period for the DEIS suggests BPA could have provided more complete disclosure of project impacts.

GC-5: The DEIS does not discuss consistency with federal, state, and local regulations and policies.

394-008 | NEPA regulations require that an EIS discuss possible conflicts between the proposed action and the objectives of federal, state, and local land use plans, policies and controls. Where inconsistency exists (as for example regarding King County's sensitive areas and Shoreline Management provisions), the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law [40 CFR 1506.2(d)].

394-009 | In its scoping letter, SPU identified the need for BPA to address effects of the project on the federally sanctioned and approved HCP. BPA indicates that USFWS [and NMFS] will have to "decide if the transmission line facilities require any change to the existing Habitat Conservation Plan..." The DEIS does not discuss the proposed action's impacts on the CRW HCP. SPU is stating its position clearly: 1) SPU will not accept any need to modify the HCP as a consequence of BPA's activities; and 2) BPA must provide mitigation for any impacts that reduce the conservation value of the City's HCP that, at a minimum, compensates for that reduction in value.

394-010 | BPA also failed to coordinate with federal agencies on Endangered Species Act prior to releasing the DEIS. The DEIS fails to fully assess impacts on endangered and threatened species such as Chinook salmon, coho salmon, and marbled murrelet (see specific comments elsewhere in this comment letter).

GC-6: The DEIS does not disclose whether or not impacts are significant.

394-011 | The DEIS is largely silent regarding any determination of the significance of impacts. The DEIS uses the terms "low, medium, and high" to describe impacts. This assists making relative comparisons among the alternatives considered, but it avoids identifying whether or not these impacts are "significant." Based on the NEPA regulations definition of "significant," many of the impacts identified in the DEIS would qualify. However, the DEIS fails to disclose this information. Thus, the public and other agencies, as well as decision-makers, do not have adequate information to review. Because of the importance of "significant impacts" in the NEPA process, failure to disclose this information undermines the very intent of NEPA itself.

GC-7: The DEIS fails to discuss the Decision-making Process

394-012 | The DEIS says very little about the decision-making process regarding this proposed action. It says almost nothing about the decision BPA has already made regarding narrowing the range of alternatives and the currently preferred alternative (including who made these decisions, when, how, and why). This is important because NEPA regulations prohibit federal agencies from limiting the choice of reasonable alternatives until a Record of Decision (ROD) has been issued [40 CFR 1506.1(a)]. The fact that specific, known design information for the Proposed Alternative has been developed (and was omitted from the DEIS) suggests that BPA has limited the choice of reasonable alternatives prior to the ROD, and indicates this DEIS does not fully disclose environmental impacts.

394-013 | The DEIS also says very little about the remainder of the process. What happens after the DEIS, and what criteria will be used? For example, will BPA confirm a preferred alternative after the DEIS? Will all of the alternatives be reviewed in greater detail in the FEIS, or will it just cover the preferred alternative? When will BPA take final action? How will that decision be made?

394-011 | BPA believes that presenting the extent of the potential impacts in four defined impact levels (no impacts, low impacts, moderate impacts, and high impacts) provides helpful information to the reader and the decision maker since each level is defined and specific to the resource impacted. Readers are then able to evaluate the "significance" of the impact based on the potential change to the resource.

394-012 | Please see responses to Comments 411-006 and 394-006. The expanded range of alternatives in the SDEIS allows BPA to determine which course of action best meets the purpose and need described in the SDEIS. The fact that BPA chose to more fully analyze additional alternatives shows that BPA has not limited the choice of reasonable alternatives prior to the Record of Decision.

394-013 | BPA disclosed its preferred alternative in the SDEIS and has included more information on the various alternatives. Alternative 1 remains BPA's preferred alternative. BPA's Administrator will make a decision on this project using the information developed during the NEPA process. The Administrator will make a final decision in a Record of Decision at least 30 days after the publication of this FEIS, as required by Council on Environmental Quality regulations. If the Administrator decides on one of the action alternatives, BPA would initiate action after the Record of Decision is signed and after all required permits and other legal obligations are met.

394-014 | It was BPA's intention to respond to all scoping comments in the DEIS. Many of the comment examples raised have been addressed in more detail in the SDEIS. Please see responses to individual comments from letter 394 to determine how and where additional information on specific issues raised during scoping were addressed in the SDEIS.

394-015 | Mitigation will be addressed in the appropriate detail in the Mitigation Action Plan to be prepared for this project, and in association with permitting discussions with the appropriate federal, state, and local regulatory agencies.

BPA has purchased land that could replace that lost within the Cedar River Watershed and is in the process of purchasing more

GC-8: Scoping comments from the City of Seattle were not addressed in the DEIS.

394-014 Scoping letters from SPU and SCL (October 2, 2000) raised several specific points that are not addressed in the DEIS. These issues include the purpose and need for the project, alternatives outside of the CRW, effects on the drinking water supply during construction, and effects of the proposed transmission line on the HCP, among others. Such omission is contrary to CEQ guidance that states “Every issue that is raised as a priority matter during scoping should be addressed in some manner in the EIS, either by in-depth analysis, or at least a short explanation showing that the issue was examined, but not considered significant for one or more reasons” (CEQ 1981).

GC-9: The DEIS lacks mitigation for unavoidable impacts.

394-015 “Mitigation measures” cited in the DEIS are actually standard best management practices (BMPs) and not really project mitigation measures. That is, they do not offset, reverse, or rectify the impacts of constructing the proposed action. Mitigation measures cited in the DEIS never include proposed compensatory mitigation. If “maintaining environmental quality” (p. S-2) was, in fact, one of BPA’s purposes in developing this project, then compensatory mitigation would have been integral to that purpose. For example, although the DEIS states that impacts on ESA-listed species of fish are “high,” BPA fails to commit to any mitigation that would offset those impacts.

GC-10: Although impacts to cultural resources could be substantial, the DEIS describes no mitigation.

394-016 Some areas in the project area and within the CRW have a high likelihood of containing cultural resources or Traditional Cultural Properties, and thus potential for significant impacts. The DEIS omits specific results of archaeological and CMT surveys that have been conducted for this project. Survey results should have been considered in the DEIS. The technical report for this discipline should have been included in the DEIS. The DEIS should have included proposed mitigation actions for any identified sites (if any). Also, the DEIS should recognize that SPU has archaeological standards for the CRW that need to be (and were) followed.

394-017 The DEIS’s assertion that impacts will be “low” for the proposed action are unsupported by the existence of substantial uncertainty regarding impacts on archaeological resources or Traditional Cultural Properties, for which no assessment has been completed. Given the location of the project, these impacts could be significant. The DEIS should explain this uncertainty, qualify the description of impacts, and provide the needed information for public review.

GC-11: The DEIS does not address regulatory requirements related to drinking water.

394-018 In general, the DEIS seems to largely ignore the fact that the Cedar River Watershed is a high quality, unfiltered source of water for 1.3 million people in the Puget Sound region. A casual reader would obtain the impression the CRW is primarily a nature reserve, with a secondary, incidental role as a municipal water supply source.

394-019 The DEIS fails to adequately describe potential impacts to the drinking water supply for 1.3 million people. Incidents such as turbidity plumes and diversion shut-downs are critical and significant events in the management of SPU’s water supply systems in the CRW. The DEIS needs to address the regulatory requirements related to drinking water and the potential environmental impacts of their proposed action on the drinking water supply.

for the purpose of compensatory mitigation. Please see response to Comment 340-002.

394-016 Comment noted. The DEIS omitted the results of the cultural resource survey since the survey had not yet been completed at the time the DEIS was released. HRA performed a thorough survey of the preferred route and located a logging feature and a trench feature, neither of which appears to be eligible for the National Register of Historic Places. The contractor conducted further work at the trench feature, at the request of OAHP and the Muckleshoot Tribe. SPU protocols for cultural surveys were followed. Appendix X has standards of protection required for any new finds during construction.

394-017 The statement that impact to cultural resources is expected to be low was based on a sensitivity study of the project (DeBoer 2000). The *Draft Cultural Resource Survey Technical Report* (Bialas 2001), based on an intensive survey with subsurface testing, located only two cultural resources and determined both as not eligible for listing in the National Register of Historic Places.

394-018 Additional information regarding the Cedar River Watershed and its importance as a source of drinking water was included in the SDEIS.

394-019 Additional information regarding the Cedar River Watershed and the potential impacts of the proposed project to the drinking water supply was included in the SDEIS.

394-020 BPA created an extensive mailing list based on the mailing list developed for the Cedar River Watershed HCP. The purpose of the mailing list was to identify elected officials and individuals and groups who could be affected by the project. The mailing list included local, state and federally elected officials, tribes, environmental groups, landowners and others.

394-021 Please see response to Comment 382-011.

394-022 Use of existing crossings of major rivers and streams is proposed as follows:

GC-12: BPA failed to provide public notice to that group of citizens most affected by the proposed action: the people who rely on the CRW for their drinking water.

394-020

Public notices and public meetings related to the NEPA scoping and DEIS comment periods have not been directed to the most affected group of citizens: the 1.3 million people who rely on the CRW for their drinking water. This is a violation of NEPA guidance and regulation.

SPECIFIC TECHNICAL COMMENTS ON THE DEIS

NOTE: Regarding the remaining comments in this comment letter and its attachments, SPU does not expect a proposed action to be fully designed for purposes of environmental impact assessment. However an EIS either needs to commit to specific project details or evaluate all reasonable approaches to those components of the proposed action.

SUMMARY

394-021

S2.1.3 The DEIS is not clear why all “woody vegetation” would need to be cleared on the ROW. Also, failing to estimate the area of clearing outside the new (150-ft) ROW results in an understatement of impacts. The DEIS is also inconsistent as to the clearing zone width, as described elsewhere in SPU’s comment letter. Further, in conversations with SPU, BPA said they would need to clear an average of 200 ft.

S2.1.5 See comment below under 2.1.1.8.

394-022

S2.1.4 BPA says that new roads may cross rivers and streams, but that no new bridges will be built. If a road crosses a river, a bridge would be required. For SPU and the public to evaluate potential impacts, BPA must specify which rivers and streams will be crossed and what type of structure will be constructed at each crossing.

394-023

S3.8 The DEIS consistently fails to clarify potential for impacts from vegetation clearing outside the 150 ft ROW.

394-024

S3.10.1 The DEIS should state explicitly that some of the areas in the project area and in the CRW have a high likelihood of containing cultural resources or Traditional Cultural Properties and thus a strong potential for significant impacts.

394-025

S.4.2 Transportation impacts should include the impacts of hauling timber and moving equipment and materials to and from the project area, unless those impacts are clearly addressed elsewhere, which does not seem to be the case.

394-026

S.4.6 In its DEIS scoping letter, SPU identified the need for BPA to address effects of the project on the drinking water supply. The DEIS fails to adequately discuss the risks to the drinking water supply during project construction for any of the alternatives. These risks include the risk of spills that could contaminate the water and the risk of turbidity events that could have very serious regulatory and public health consequences for SPU.

394-027

Also, the DEIS neglects to reveal potentially significant impacts on water temperature, which is inconsistent with the conclusion on page 4-30 that impacts on listed fish species would be “high” a result, in part, of unavoidable, increased water temperature in streams and wetlands.

- Rock Creek — existing county road crossing and BPA access road.
- Raging River — no access road crossings.

One temporary bridge may be needed for construction. No water-crossing culverts need to be replaced or installed for construction. BPA is in the process of pursuing permits for replacing some existing culverts to allow for fish passage. See Section 2.1.1.5 of the SDEIS.

394-023

The DEIS does clarify potential for impacts from vegetation clearing both within the 150-foot ROW and outside. In many cases, however, this is classified as vegetation clearing and not specific to whether that clearing is inside or outside the ROW. The clearing of vegetation, no matter where it occurred, would have similar impacts.

394-024

Please see response to Comment 394-017.

394-025

Construction equipment and log trucks would need to be brought into the project area, if a decision were made to build the project. These vehicles would operate under the weight requirements as identified by the State of Washington, and if those weight limitations would be exceeded, permits would need to be obtained prior to any work being undertaken.

394-026

Vehicles and other construction equipment that use diesel, gasoline and/or hydraulic systems would be used to construct the project. In addition, maintenance and refueling of the equipment would be required. Oil or fuel spills could impact the Cedar River water quality. However, substantial construction activities, such as tower placement or road construction, would not be in proximity to water bodies such that a spill, which would involve a relatively small volume (such as from a hydraulic hose breaking) would impact the water supply. A detailed Stormwater and Pollution Prevention Plan (SWPP), or similar document, such as a Water Quality Control Plan (WQCP), would include a Spill Prevention and Contingency Plan. These plans would be prepared and approved by regulating agencies, including Seattle Public Utilities (SPU) and the Washington State Department of Health (DOH) prior to project construction. BPA would also hire an

394-028 S.4.10 The area to be cleared for the stated 150 ft ROW should be about 160 acres (for the 9-mile length), not counting trees cleared beyond the ROW, yet BPA states that 152 acres will be cleared. BPA indicates on page 2-5 that trees may be cut as far as 200 ft from the edge of the ROW. Further, BPA has informed SPU that an average of 200 ft will be cleared for the proposed action. The DEIS fails to reveal the actual amount of clearing that will occur for the project. Also, the DEIS mentions that a high impact from noxious weeds could be mitigated, but does not indicate how this will be done.

394-029 S.4.11 The DEIS concludes that impacts to wetlands would be moderate to low and that impacts to forested wetlands would be moderate are not supported. SPU disagrees. Clearing vegetation and operating equipment in wetlands will produce significant and unavoidable impacts, and clearing trees in a forested wetland destroys its normal ecological functioning. Furthermore, the DEIS proposes no compensatory mitigation, which violates the intent of state and local sensitive areas provisions (such as the King County Sensitive Areas Ordinance). The DEIS needs to correctly state that impacts to wetland resources will be significant.

394-030 S.4.16 The DEIS fails to identify potentially significant impacts on public health as a result of potential effects on the drinking water supply during construction and operation (see comments on S.4.6 above, and elsewhere in this comment letter).

PURPOSE AND NEED (Chapter 1)

1.1 Paragraph 2: "Anticipated peak use could now exceed existing system capacity as soon as the winter of 2002-2003."

394-031 1.3 "... a new 500-kV transmission line and other transmission equipment would be required by the 2002-2003 winter season...."

These and other statements are not substantiated by citation of data, studies, or other information. The DEIS needs to explicitly provide or cite the data and assumptions on which these claims are based.

PROPOSED ACTION AND ALTERNATIVES (Chapter 2)

394-032 Route variations described in this section warrant a detailed discussion in terms of how BPA intends to use these variations to address short-, medium-, and long-term regional power transmission needs. For example, if BPA plans to build a new 50-kV line from Stampede Pass in the future (which could serve the subject project's present-day purpose and need), the cost savings of doing so now may negate the simplistic current-dollar cost difference between that variation and the Proposed Action. In this regard, the DEIS needs to present a complete cost justification (which would include cost analyses of BPA's future transmission line projects) if cost is the main justification for distinguishing among alternatives. Such analyses should include full consideration of opportunity costs and the inflated costs of building these variations in the future. In addition, it appears BPA does not include all foreseeable or projected costs in their cost estimate of the proposed action, which biases their cost comparisons among possible alternatives. Not all project planning costs are included in this analysis, nor are costs for adequate mitigation of unavoidable adverse impacts from the proposed action. For example, there is no discussion of the nature or cost of the mitigation for stormwater runoff quality or quantity that federal agencies would likely require (under regional implementation of the ESA) for the 1.5+ mile of new impervious road surfaces BPA is proposing.

independent inspector with stop-work authority to monitor ongoing construction activities. Logging activities, which include the use of log trucks, yarding towers, and ground-based yarding equipment, have previously been allowed within portions of the Cedar River Watershed. In addition, SPU maintenance vehicles also operate within the Watershed. If SPU maintains a WQCP and/or SWPPP or similar plan regarding contingencies for spills within the Watershed, including their prevention and response, the BPA's SWPPP for the proposed project would include similar contingencies.

No substantial earth-disturbing construction projects, such as road building or tower construction, are anticipated immediately adjacent to or near water bodies that drain into the Cedar River drinking water supply. Clearing of most timber within the ROW will be required. Riparian areas would be spanned, however, some clearing would be required in riparian areas. Much of the proposed alignment is along low- to moderate-sloping ground and in soils that have a low susceptibility to surface erosion, such that there is a low potential for project-related mass wasting events and soil erosion; hence, a low probability of impacts to drinking water supplies. An Erosion and Sediment Control Plan (ESCP), or similar document, such as a WQCP, will be prepared and approved by the regulating agencies prior to project construction. The ESCP will include Best Management Practices (BMPs) that will be implemented as needed to reduce the potential for turbidity events. Where the project crosses steeper ground and/or more sensitive soils, more strict BMPs, including seasonal work restrictions and sediment barriers, can be implemented.

394-027 Section 3.4 of the revised Fisheries Technical Report (Appendix A) discusses the role of shade as a control on stream temperature in the streams that would be affected. Section 4.6.2.1 of the SDEIS discusses how stream temperature would likely be affected by construction of the transmission line. Likely effects on stream temperature are also discussed in the biological assessment for the proposed transmission line.

394-028 The length of the preferred route is just a little less than the stated 9 miles thus accounting for the 152 acres stated in the DEIS. Please see responses to Comments 366-002, 382-011 and 394-108.

2.1.1.1 Transmission Structures

394-033 | To minimize impacts of tower construction, the DEIS should commit to using helicopters to the extent possible for delivering and assembling the towers.

2.1.1.4 Right-of-way Clearing

...danger trees could be taken as far as 200 ft from the ROW....

394-034 | This is not consistent with Table 2-1 (page 2-6), which indicates clearing distances of 153 ft (horizontal distance) and 163 ft (slope distance) from the edge of the 150 ft ROW. Also, there is no mention of the temporary 50 ft construction easement BPA previously mentioned in conversations with SPU. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action and its environmental impacts.

394-035 | Also, based on Table 2-1, BPA would clear an additional 90 ft beyond the 150 ft ROW where trees are about 120 ft tall (as in the CRW). This calculation indicates that the DEIS significantly underestimates the acreage to be cleared. Apparently, 145 acres or more would be cleared in the CRW alone, making the total figure of 152 acres for the 9-mile ROW in the CRW impossibly low.

394-036 | The DEIS refers to the possibility of developing and using different criteria for tree removal in the CRW that would reduce the number of trees to be removed, stating that the decision will be in the FEIS. The DEIS should provide information on those criteria for public comment prior to releasing the FEIS. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action and its environmental impacts.

Also, see comments on S.4.10 above.

2.1.1.5 Access Roads

394-037 | The DEIS fails to present sufficiently detailed road plans or data, making evaluation of the DEIS impossible. If such data are expected to be included in the FEIS, they should have been included in the DEIS.

"A disturbance width of 20 feet was used to calculate disturbance acreages."

394-038 | Also, this section indicates new road ROWs will be 50 ft and that disturbance widths between 36 and 40 feet will be routine. Disturbance acreages in the DEIS should have been calculated using accurate and worst-case widths (i.e., 40 ft for temporary and permanent roads within and outside of the ROW, not 20 ft). Also, it is unclear from this discussion if impacts from temporary roads and permanent and temporary staging areas were considered in the analysis of impacts from access roads.

394-039 | In addition, the DEIS fails to mention or assess new roads in the context of their being new impervious surfaces, which has important ESA implications. In fact, it is our understanding all new impervious surface (such as is proposed in the proposed action) inside the region of critical habitat for Chinook and coho is required to be mitigated for stormwater runoff quantity and stormwater runoff quality before the federal Services are able to consider a project such as this one to be in compliance with the ESA. The DEIS needs to discuss this situation and address the required and appropriate mitigation for new impervious surfaces, as mandated by the ESA and its regional implementation. The DEIS should assess the impacts caused by construction and operation of required mitigation facilities.

394-029 | BPA disagrees that impacts would be greater than those stated in the EIS. Please see response to Comment 340-002 for information about mitigation.

394-030 | BPA does not expect any major impacts to public health and the drinking water supply during construction and operation of the proposed project. Mitigation is proposed to reduce the risk of impacts. Impacts to surface water and ground water would be low.

394-031 | The data used for these studies is a compilation of all customers load forecasts, the existing transmission system, expected generation condition forecasts and expected interchange of power among utilities. BPA prepares this study annually and it is also used by other Northwest utilities. For the particular study that led to this proposed project, in addition to the forecasts, these assumptions were used: extreme cold weather load in the Northwest (similar to the Arctic Express of 1989); all available thermal generation in the Puget Sound Area is running (at lower generation levels the project would be needed earlier) and Intalco Load on (Intalco presently holds a transmission contract with BPA to serve the smelter although the smelter is not currently operating. However, BPA has included the load in studies because the transmission capacity has to be available because the load could return at any time). At the time of the studies, the joint study utilities (Seattle City Light, Snohomish County PUD, Tacoma City Light and Puget Sound Energy) approved these assumptions. See Section 1.2.1 of the SDEIS.

394-032 | Cost estimates have been expanded in the SDEIS. See Sections 2.1.4, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5.12, 2.2.6.12, 2.2.7.12, and 2.2.8.12. The mitigation that would be included with each alternative and an estimate of the costs are included in these sections.

394-033 | Helicopter construction techniques would be required for the proposed action if BPA decides to build a transmission line.

394-034 | Table 2-1 has been expanded in the SDEIS to clarify the areas where full clearing is likely within the right-of-way, and where

2.1.1.6 Stream Crossings

394-040 Omission of information here and in Section 4.6.2.2 renders evaluation of impacts resulting from new stream crossings impossible. This is a significant and fatal flaw in the DEIS. The DEIS should provide specific information on where new crossings will be constructed, what structures will be used, and how such construction could proceed.

2.1.1.8 Staging Areas

394-041 The DEIS refers to staging areas for construction, but does not specify where those might be located. Staging within the CRW would pose substantial risks to the drinking water supply and would have significant and complex impacts, and the magnitude and nature of those risks and impacts will depend on the location of those areas. To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. Staging areas in the CRW are not consistent with these objectives.

It is unclear if the staging areas were considered in the analysis of impacts (such as the clearing analysis). The DEIS should be explicit if staging areas were included in the impact analyses.

2.1.4 Cost Estimate

394-042 The DEIS should include pertinent details of the cost estimates for the proposed project and all other alternatives (including those that were eliminated), particularly if costs were the basis for dropping certain alternatives. In addition, the DEIS should include citations of where fully detailed cost estimates and analyses may be obtained. All project alternatives (including those that were eliminated) need to be evaluated on the same projected cost bases.

2.3.2 Local Generation

394-043 The DEIS fails to mention several local hydroelectric projects that have recently connected to the power grid, or that are being built in partnership with Puget Sound Energy. These projects include Black Creek (rated 3700 kW at 1247 ft), Calligan Creek (rated 5500 kW at 1045 ft), and Hancock Creek (rated 6300 kW at 1129 ft). The DEIS needs to present a detailed discussion of how these power sources fit into regional power planning and how they were considered in the BPA decision-making process regarding the proposed project's purpose and need.

Table 2-2

SPU has the following comments on this table and related DEIS sections:

Land use: The DEIS neglects to mention effects on HCP.

Transportation: The DEIS should include discussion of access roads

394-044 Water quality: The DEIS neglects impacts during construction regarding drinking water supply (see comments above)

Fisheries: The DEIS should include assessment in Chapter 4 that impacts to listed fish species would be potentially high. Failing to mention this here fails full public disclosure.

partial clearing would be evaluated (the removal of danger trees). In the areas identified as partial clearing, the remaining trees will be protected as much as practicable. Figure 4 has also been added to the SDEIS to graphically show the difference between horizontal distance and slope distance. The range of clearing shown in Table 2-1 is an example based on the average height of trees given, of the distances from centerline to the furthest tree to be cut as a danger tree. This is merely an example. There may be instances where the trees are taller than the average and individual trees could be removed at distances even farther than those listed in the table, but these instances would be few.

The 50-foot easement is a road easement. Please see response to Comment 382-009.

394-035 See response to Comment 394-034.

394-036 See response to Comment 340-004.

394-037 The description of the types of impacts that could be expected from constructing and maintaining access roads, and an approximation of their acreage were included, as that was the best available information BPA had in its possession. Information was updated in the SDEIS.

394-038 The 20-foot width was used for calculations because it would be closer to the average disturbed width. The 50-foot width is used for acquisition purposes outside of the purchased power line right-of-way. Many of the proposed access roads to be constructed are spur roads from existing power line or watershed system roads and would be short. This type of access road is not constructed to the same standard as a longer system access road. The road would be constructed using an in or out-slope type of design that does not require ditching. The typical disturbed width would be less than 20 feet.

Typically all temporary road and staging areas are re-vegetated. Staging areas were not included in the analysis.

394-039 BPA access roads are not impervious. While it is true that the roads have rocked surfaces, the surface is not impermeable.

- 394-045 | Wetlands: Impacts are much greater than stated, especially to extensive forested wetlands in the CRW.
- Cultural Resources: Potential for impacts to archaeological resources or Traditional Cultural Properties are uncertain but could be substantial.
- Public health and safety: The DEIS fails to mention potential public health issues associated with impacts on the drinking water supply during construction and operation.

CHAPTER 3—AFFECTED ENVIRONMENT
3.1 Land Use

- 394-046 | The DEIS should disclose that land use impacts would be “high” in the CRW, as the proposed project would substantially reduce conservation measures in the City’s HCP, which is a primary land-use commitment in the project area.
- 394-047 | Also, the DEIS does not adequately describe project details for (and subsequently, potential impacts of) road construction and maintenance, rock source, and construction staging. Clearly, there will be impacts to the transportation system in the CRW; most CRW roads and transportation structures are not adequately constructed to carry large volumes of timber or construction equipment and materials. For example, the DEIS does not identify haul routes for rock or timber; rock source for roads; location of new access roads; location of upgrades to existing roads for bridge crossings, turning radii, width, slope (and other geometry), and surface; location of staging areas; and compensatory mitigation for unavoidable adverse impacts caused by these facilities and activities. The DEIS does not mention the new DNR rules for road BMPs. Also, the DEIS does not address who will bear the cost of on-going maintenance of new access roads and transportation structures (such as bridges and gates). Also, SPU has important safety concerns with drilling, shooting, and transport of explosives in the CRW; these proposed activities are not adequately described. The DEIS also fails to specify timber haul routes, yet selection of routes will have a major influence on the magnitude and nature of impacts both in the CRW (on habitats and species) and outside the CRW (on public roadways).

3.1.2 Cedar River Watershed

- 394-048 | *“...Seattle owns title to all but a small portion of the Cedar River Watershed.”*
- This is stated ambiguously. The City of Seattle owns only that portion of the Cedar River watershed that lies upstream of Landsburg. The DEIS should state this unambiguously.

3.4.8 King County

- 394-049 | The DEIS should acknowledge that the Taylor Mountain site (Manke Property) is used by hikers and equestrians.

NOTE: In general, most of the subsequent sections in Chapters 3 and 4 pertaining to fisheries, wildlife, vegetation, and wetlands were condensed versions of the text in the corresponding Technical Reports. Thus, all SPU comments on appendices A, B, C, and D (which see) can be considered to apply to sections in these Chapters as well. Statements from the DEIS are shown in

BPA roads are not constructed like the system roads within the CRW or tree farms in the region. Those roads are built to withstand heavy traffic while BPA access roads (unless they are to become part of a private ownership road system) are built for line construction then limited line maintenance. The roads are designed and constructed to a standard consistent with existing drainage design practices.

Existing standards are used to design erosion control measures and are employed as soon as construction begins. An erosion control plan is filed prior to start of construction.

- 394-040 | At the time of publishing the DEIS, sufficient line design information was not available, i.e., tower locations. Some preliminary information was noted but site-specific data was not possible without the tower locations. All stream crossing information is now available and structure design has been completed. See response to Comment 394-022. The map presented in Figure 5 of the Wetlands Technical Report (revised Appendix D) shows where all the proposed towers and new roads would be located.
- 394-041 | The location of staging areas are determined by BPA’s construction contractors and are not known at this time. No staging areas will be allowed on the Cedar River Watershed. Staging areas were not included in the analysis because they will be chosen by the contractor, if a contract is awarded.
- 394-042 | Overall cost estimates are included in the SDEIS for each alternative. The costs are based on “typical per unit” costs. Those costs are modified with any additional information available. See response to Comment 394-032.
- 394-043 | In total these three hydroelectric plants generate 15.5 MW maximum. The total Puget Sound area load in 2003 for extra heavy cold weather is about 10,000 MW. The three plants could serve only about 0.155 percent of the total area load or in other words could serve about 8 percent of one year’s load growth. These are very small generators and as such are usually netted with load near the generator. Although the generators are rated for 15.5 MW, the actual generation available during extreme winter cold weather may be much

italics. SPU comments are shown in normal font below the subject DEIS statement (if any). Typically, SPU's comments pertain only to those lands owned and managed by the City of Seattle within the project area.

3.6.3 Groundwater

394-050 | The DEIS fails to mention the groundwater influence on the lower Cedar River mainstem and its relationship to the water supply system.

3.6.4 Water Quality

394-051 | The DEIS fails to address the protection of drinking water. This section also seems to imply that, because there are currently no water quality problems in the Cedar River Watershed, that some degradation of the water quality would be acceptable. This is not correct. Also, the DEIS fails to mention that Washington State classifies the Cedar River above Landsburg as being in a special category where no waste discharges are permitted. The DEIS should correct these deficiencies.

394-052 | BPA may not be aware of how the regulation of drinking water supplies has increased over the last few decades. The existing BPA transmission line through CRW was constructed at a time when regulation of drinking water supplies was much less strict. This is especially true of the regulation of supplies from unfiltered surface supplies, such as at CRW. Therefore, construction of the proposed action would occur in a much different regulatory environment than existed at the time the first line was constructed.

394-053 | This regulatory environment results from the federal Safe Drinking Water Act and its amendments, and is defined by detailed regulations adopted by EPA and Washington Department of Health (WDOH). Supplies with unfiltered sources must show adequate source protection through development and implementation of a Watershed Control Program (WCP) that has been approved by WDOH. To remain compliant with WDOH regulations, the WCP would have to be modified to address the construction of the proposed action. On previous construction projects in the watershed, this has been accomplished through a Water Quality Control Plan (WQCP) specific to the project.

Development and implementation of an effective WQCP for a construction project of this magnitude is not a trivial matter. It must identify detailed management practices specific to the methods, materials, and equipment likely to be used on the project, and these practices must be integrated into the plans and specifications given to the construction contractor. The dispersed nature of the construction and its relative proximity to the intake make a WQCP critically important.

394-054 | The DEIS should acknowledge and discuss this regulatory environment for the protection of drinking water supplies (including Safe Drinking Water Act and Surface Water Treatment Rule). A spill contingency plan is mentioned as mitigation for fisheries on page 4-34, but such plans must expressly deal with drinking water as well.

3.7 Fisheries

394-055 | The DEIS incorrectly assumes that Chinook and coho salmon will not likely be present for any of the alternatives. The Cedar River will have Chinook salmon in the future. Coho salmon are likely to be in Rock Creek in the future. The Cedar River and its tributaries in the project area are tributary to waters that do support Chinook and coho salmon. The DEIS should address this circumstance. The DEIS should also address potential impacts of permanent and temporary habitat modifications on federally listed fish species. Under the Endangered Species Act and Northwest Power Act, BPA has important

less due to freezing and reduced runoff due to the cold weather. These projects were not considered in the decision making process because their impact is minor.

394-044 and 394-045 | Table 2-2 is a summary table of impacts. Table 2-2 was updated and incorporated into the SDEIS as Table 2-3. The DEIS and the SDEIS addressed these specific issues in more detail in their chapters on effects, Chapter 4.

See the list of issues and related comment numbers at the end of the chapter. This list includes comments and responses that address HCP impacts, access roads, water quality, fisheries, wetlands, and cultural resources. Additional information on fisheries is found in Appendices A, N and U of the SDEIS. Additional information for Appendix A is in the FEIS. Additional information about wetlands is in Appendix D (also revised for the FEIS), and Appendix Q of the SDEIS.

394-046 | Comment noted.

394-047 | At the time the DEIS was being assembled, BPA had not conducted a field review of the existing access road system including drainage structures. During the field review of the road system within the CRW, a review that included both previously-acquired system roads (roads for which BPA has acquired rights of use) and unspecified roads, road quality was evaluated. BPA concluded that with few exceptions the existing watershed system roads were capable of withstanding the travel of line construction vehicles because the roads were originally constructed for logging activities. In most cases rock depths exceeded 12 inches and all roads were ditched and drained and kept in good serviceable condition. The exceptions would be the weight limitation placed on the Cedar River Bridge east of the existing power line right-of-way and some "soft" spots on some roads that would require additional rock. Existing drainage structures were adequate; removing and or replacing them would only add to disturbance and siltation.

394-056 | responsibilities as part of the effort to protect, mitigate, and enhance regional salmon runs. However, it appears (as evidenced in the fisheries technical report and Section 2.1.15) this proposed action's adverse impacts on salmon and their habitats are not adequately mitigated. Also, the DEIS should discuss potential impacts to steelhead (an HCP species) beyond the very limited and inadequate discussion presented.

"The fish resources in the study area include resident and anadromous species."

394-057 | This is a correct but imprecise statement. In the CRW, not all of the tributaries are inhabited by both resident and anadromous species. Also, neither the mainstem Cedar River nor its tributaries currently have anadromous species, but are expected to in coming years. Only basins or tributaries that do not contribute water to the water supply system currently are inhabited by anadromous species (e.g., Walsh Lake Drainage Basin).

Map 8 (and other if appropriate)

394-058 | Upper Williams Creek and Steele Creek should be shown as potential anadromous fish habitat.

3.7.2.1 Proposed Action

"...cross nine fish-bearing (Type 1, 2, or 3) streams and an unknown number of non-fish-bearing (Type 4 or 5) streams."

394-059 | Type 4 streams should no longer be considered non-fish-bearing unless extensive sampling has been conducted to determine if that is the case.

Segment C

394-060 | The DEIS should include a discussion of steelhead trout at the end of this section along with Chinook and coho salmon.

Segment D

"...is used by cutthroat trout and, where it joins with the Walsh Lake diversion ditch,...."

394-061 | This statement is incorrect and misleading. The Walsh Lake Diversion Ditch does not join Rock Creek except under emergency overflow conditions, which occur rarely during peak flow events. The relationship between Walsh Ditch and Rock Creek needs to be clarified in the DEIS; more detail for overflow conditions and operation needs to be presented in the DEIS.

"...the river and its floodplain are wide enough that the existing forest can provide only about 10 percent riparian shade, so that riparian shade is not a primary control on stream temperature in this reach." (page 3-23)

and

"...the river and its floodplain are wide enough that the existing forest can provide only about 20 percent riparian shade, so that riparian shade is not a primary control on stream temperature in this reach." (page 3-23)

BPA does not plan to construct any additional through access roads. While there will be new road construction, all roads within the CRW will be dead-ended. Most new roads will be short, accessing only one or two towers and most are being constructed because the existing route to travel along the existing right-of-way has been designated as a wetlands or wetlands buffer. Some existing routes would be closed and allowed to revegetate naturally. All material will move along designated routes approved and acquired if in private ownership by BPA. Movement of materials on public roadways is the responsibility of the construction contractor.

Rock sources have not been identified. Location and material acceptability are the responsibility of the contractor. BPA provides specifications only.

Staging areas are the responsibility of the contractor. BPA does acquire the main materials yard where steel and conductor may be picked up.

BPA bears all maintenance responsibility for roads and facilities it constructs whose sole function is construction and maintenance of the power line and right-of-way. If BPA acquires a right of easement along an existing road it will be responsible for maintenance during the construction period, and will pay for damage caused by BPA's use after construction. If BPA constructs a gate or installs a drainage structure along an existing privately owned road, BPA may accept full responsibility for maintenance of the unit depending on formal agreement with the fee owner of the property.

394-048 | This sentence has been changed.

394-049 | This information has been added.

394-050 | In addition to surface water sources, water in the Cedar River, which provides drinking water to 1.3 million people, is also partially derived from groundwater sources. As such, contamination of the groundwater could impact the drinking water supplies. Project construction- and operation-related waste discharges, such as turbid water, spills, and project-related sanitation, would be strictly controlled. Construction and

394-062 | SPU disagrees with these unsupported statements. The DEIS should present data that support this contentions.

"Once passage around the Landsburg Diversion Dam has been established (scheduled for 2002 or 2003), it is likely..." (page 3-23 and 3-25)

394-063 | This statement is incorrect. This reach will support anadromous fish now prevented from upstream migration by the Landsburg Diversion Dam, including Chinook and coho, and excepting sockeye. The environmental analysis in the DEIS needs to be based on correct assumptions.

3.7.2.3 Alternative 3

"...Taylor Creek is known to contain resident rainbow trout...."

394-064 | SPU data indicate Taylor Creek has predominately cutthroat trout. Relatively small numbers of rainbow trout are also present.

3.8 Wildlife

394-065 | The "project area" as defined in the DEIS is an area within 0.25 mile of the ROW. This is too small for the scale of home range sizes and dispersal capabilities of many wildlife species of concern (for example, spotted owl, pileated woodpecker, northern goshawk, marten, and fisher). Also, several wildlife species were eliminated from analysis because habitat is not currently present within 0.25 mile. This limit is arbitrary, especially considering the large home ranges of many species. The DEIS should be based on a wildlife analysis that uses larger areas such that wide-ranging species with large home ranges are included.

394-066 | Also, the DEIS incorrectly states that marbled murrelet is not expected to occur in the project area. In fact, murrelets have been detected in the upper watershed, where they are possibly breeding. Murrelets are known to fly along major water courses (like the Cedar River) as they travel between marine feeding sites and their terrestrial nest sites. Murrelets can be expected to fly along the Cedar River—through the project area—to and from these areas. Thus, this species is at risk from additional power lines. The DEIS should address the impacts to this ESA-listed species.

3.8.2.1 Forest Community Dependent Species

"... merlins, pileated woodpeckers, and Vaux's swifts are also unlikely to nest within the project area (see Appendix B.)"

394-067 | Pileated woodpeckers are known to forage regularly in the riparian zone of the Cedar River in the watershed. Suitable nesting habitat is also available in the riparian zone.

Table 3-7

394-068 | Peregrine falcons nest in the Cedar River Watershed within approximately 5 miles of the proposed ROW corridor.

3.9.3 Vegetation Cover Types

operation of the proposed project should not result in a detectable degradation of the ground water quality. This information has been added to the SDEIS. See also Appendix Y.

394-051 | Comment noted. This information is found in Section 3.6.4 of the SDEIS.

394-052 | Comment noted. Every reasonable effort would be employed to avoid potential impacts from project construction and operation to the drinking water supplies.

394-053 | BPA understands that this WQCP is an instrument used to modify the Watershed Control Program (WCP) that has been adopted by state and federal agencies to maintain the water quality in the Cedar River Watershed. BPA would work with the City to help prepare a modification to the WQCP.

394-054 | If BPA decides to build a line, it would strive to meet the requirements of all regulations to maintain a clean and safe drinking water source. As previously stated, appropriate plans will be designed, approved and implemented to avoid impacts, such as spills and turbidity plumes, to the drinking water source.

394-055 and -056 | Impacts to Chinook and coho salmon are addressed in Section 3.2.4 of the Fisheries Technical Report (Appendix A) and further detail is provided in the Biological Assessment for the proposed transmission line. The results of informal consultation with NOAA Fisheries on these species are described in Section 5.2 and Appendix U of the SDEIS. Appropriate compensatory mitigation for habitat impacts is planned. See response to Comment 340-002. Impacts to steelhead are discussed in Sections 3.0 and 4.0 of the Fisheries Technical Report.

394-057 | Comment noted.

394-058 | The distribution of streams providing potential anadromous fish habitat is based on maps presented in the Final Cedar River Watershed HCP (City of Seattle 2000).

394-059 | Type 4 streams are defined as non-fish-bearing under the Washington Forest Practices Rules (WFPB 2000). The Final Cedar River Watershed HCP (City of Seattle 2000) does not identify any streams classified as Type 4 as being fish-bearing.

3.9.4.1 Proposed Action

394-069 | The DEIS needs to describe the age and size of affected trees in Cedar River riparian zone in the Watershed, especially the Sitka spruce and their history.

3.10.1 Regional Overview (wetlands)

*"A total of 23 wetlands were identified within the ROWs of the alternatives." and
"Wetland buffers were generally intact and forested."*

394-070 | These statements are misleading. Wetland buffers may be intact within the proposed ROW alternatives. In the existing ROW, wetland buffers are not "intact and forested."

"Wetland buffers provide....."

394-071 | The DEIS needs to discuss the positive effects of intact stream and wetland buffers on water quality and the water supply, as well as a discussion of the positive effects of intact stream buffers on stream temperature, bank stability, etc., and the associated benefits for fish, amphibians, and other species.

CHAPTER 4—ENVIRONMENTAL CONSEQUENCES

4.4. Geology and Soils

394-072 | DNR's Watershed Analysis procedures suggest that all alternatives go through High and Moderate Landslide Potential areas (for example, inner gorges). However, the DEIS contains no discussion about this or the ancient, deep-seated landslide in the Rock Creek/Steel Creek basins, or the project's potential for causing mass-wasting events and the associated catastrophic channel disturbances. The DEIS should include this. Also, the DEIS should include discussion or analysis of soil erodibility and soil erosion BMPs.

4.5.2 Water Quality

394-073 | The DEIS fails to address the protection of drinking water. The DEIS should acknowledge this regulatory environment for the protection of drinking water supplies (see comments under Section 3.6.4). A spill contingency plan is mentioned as mitigation for fisheries on page 4-34, but such plans must expressly deal with drinking water as well.

"the City of Seattle and some surrounding water districts"

394-074 | The DEIS should replace this phrase with "about 1.3 million people in the City of Seattle and 27 suburban cities and water districts."

4.5.2.1 Proposed Action

"...it is possible that surface water runoff containing fuel spills, herbicide runoff and other contaminants could reach the main stream..."

394-075 | The DEIS mentions here the Proposed Action could result in herbicides entering the Cedar River. This is inconsistent with statements elsewhere in the DEIS that herbicides will not be used in the Cedar

394-060 | This information has been added to the SDEIS.

394-061 | The relationship between the two streams has been clarified in the SDEIS and the revised Fisheries Technical Report (Appendix A).

394-062 | Methodology for analysis of riparian shade is based on that presented in revised Appendix D of the Watershed Analysis Manual, Version 4, published by the Washington Department of Natural Resources. Model predictions were further verified using program SSSHADE and SSTEMP (*Bartholow, J. 1989. Stream Segment Temperature Model (SSTEMP) Version 3.5. Temperature Model Technical Note # 2. Fort Collins, U.S. Fish and Wildlife Service*). These models show negligible temperature effects resulting from altering 10 percent shade cover on a 1,000-foot long stream reach. The data presented in the Fisheries Technical Report (revised Appendix A) support the report's conclusions. These findings are fully consistent with the most detailed analysis of the shade-temperature relationship yet performed for Washington Streams: *Sullivan, K. J.; Tooley, J.; Doughty, K.; Caldwell, J. E. and Knudsen, P. A. 1990. Evaluation of prediction models and characterization of stream temperature regimes in Washington. TFW-WQ3-90-006. Timber Fish & Wildlife, Department of Natural Resources, Olympia, Washington.*

394-063 | Comment noted.

394-064 | This information has been included.

394-065 | The project vicinity has been enlarged and is described along with the approach to addressing wildlife impacts in Section 3.8 of the SDEIS. In general, there are two levels at which wildlife habitat is discussed. The broad project vicinity is used to address issues related to wide-ranging species, migratory species, and species with large home ranges. The project area, defined as the area within 0.25 miles of the proposed project, is addressed in more detail because the potential impacts of the project would likely be focused within that area.

The list of species with federal or state protection status has been updated in Table 2 of the Wildlife Technical Report (Appendix

- 394-076 | Watershed. Also, to protect the municipal water supply, SPU has “no-tolerance” objectives for spills or leaks of hazardous materials in the CRW. The DEIS should indicate how all spills would be prevented in the CRW.
- 4.6 Fisheries**
- 394-077 | The DEIS needs to describe environmental impacts of long-term, repeated maintenance activities.
- 4.6.1 Impact Levels**
- “Construction, operation, and maintenance of transmission facilities could impact fish and their habitat as a result of:”
- 394-078 | The DEIS should describe the effect of long-term and cumulative effects of maintenance activities (e.g., repeated vegetation clearing) on soil disturbance and stream temperature regimes.
- 4.6.2 Proposed Action**
- 394-079 | The DEIS should describe potentials for dispersal of non-native and noxious weed species.
- 4.6.2.1 Removal of Riparian Vegetation**
- “...Transmission towers are typically sited on higher ground, and they generally span drainages and associated riparian areas. This siting requirement would minimize potential impacts from riparian clearing because topography facilitates placement of structures that span drainages and increases the likelihood that conductors would be above many riparian areas and require only limited removal of danger trees. Construction of the transmission line, particularly clearing riparian vegetation, has the potential for high impacts on fish. However, BPA would prepare a clearing plan as part of the design of the project to minimize this impact. This plan would evaluate areas to be cleared and the permissible height of existing vegetation that could remain. BPA would site facilities to minimize clearing of riparian areas.”
- 394-080 | SPU believes these claims can not be made without knowing the specific tower locations and associated infrastructure. Also, this statement suggests very little clearing of riparian vegetation would occur, which is not consistent with the Fisheries Technical Report. According to that Technical Report, even the Cedar River may need riparian clearing. The DEIS needs to identify which stream crossings would span drainages and which would require vegetation removal. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action.
- 4.6.2.1 Removal of Riparian Vegetation**
- “Construction of the transmission line,.....”
- 394-081 | SPU will require an approved vegetation removal plan for areas in the CRW. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

Table 4-3

B). The decision to preclude species that were not expected to occur in the project area was based on the habitat requirements for the individual species. Species with large home ranges were excluded based on the lack of habitat within the boundaries described under project vicinity. Wording in Table 3 of Appendix B was changed to “not expected to occur in project vicinity” for these species. The remainder of the species in Table 3 are either habitat specialists or low mobility species and habitat for them does not occur in the project area or vicinity.

Potential impacts to species with large home ranges are discussed in general terms in Section 4.7.2 of the SDEIS and changes in the amount of habitat available for species in the project area are displayed in Table 4-10 of the SDEIS.

- 394-066 | Comment noted. The project vicinity was enlarged in the SDEIS to include the upper watershed. Table 2 of the Wildlife Technical Report (Appendix B) lists marbled murrelet as “may occur in the project vicinity.” The risk of bird collision with transmission lines is discussed in Section 4.7.2.4 of the SDEIS.
- 394-067 | While signs of nesting activity were not observed during field reconnaissance surveys for this project, and the area does not meet the usual description of pileated woodpecker nesting habitat (as in Rodrick and Milner 1991), Section 4.1.2 of the Wildlife Technical Report (Appendix B) was revised to reflect the comment.
- 394-068 | According to existing data sources (i.e., the Cedar River Watershed HCP [City of Seattle 2000] and the WDFW Priority Habitats and Species Database [WDFW 2000]) no peregrine falcon eyries occur in the Cedar River Watershed or in the project vicinity, as defined in the Wildlife Resources Report, Section 3.3.
- 394-069 | This information was not provided in the Vegetation Technical Report (Appendix C) or the Wetlands Technical Report (revised Appendix D). However, we do not feel it is necessary to collect or present the information because it would not substantively contribute to the impact analysis, or the identification of potential significant impacts as required under the National Environmental Policy Act. Riparian vegetation at the Cedar

394-082 Information from the HCP in this table is incorrect. Thus DEIS comments related to this table are also incorrect. The table appears to be based on the Draft HCP, not the final, but, even so, is simply wrong. For example, buffers are not an element of the Final HCP (2000). This table and any other references to the HCP should be revised, updated, and clarified throughout the DEIS and its technical appendices to reflect content of the final version of the HCP (2000).

"...features would be installed where needed in accordance with the Washington State Forest Practices Rules" (WSFPR)

394-083 SPU standards will be required if they exceed WSFPR. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

4.6.2.2 Culvert Installation

394-084 SPU believes some culverts on BPA's access roads for the existing transmission line may be fish and flow passage barriers. The DEIS should disclose this situation, indicate which of those culverts are fish and flow passage barriers, and describe the methods BPA will use to correct these problem culverts as part of their construction of the proposed action. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW. SPU standards will be required if these exceed WSFPR.

"....(as with a hung culvert)."

This statement should include "hung/perched" to describe a physical barrier.

"BPA would comply with guidelines for fish passage...."

394-085 SPU standards will be required if these exceed WSFPR. The DEIS and technical appendix should commit to ensuring all pertinent plans (such as all road and culvert-related plans) would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

"...and using effective sediment and erosion control methods."

394-086 The DEIS needs to specifically describe these methods.

4.6.2.6 Accidental Spills of Hazardous Materials

"BPA would prepare a Spill Prevention and Contingency Plan..."

394-087 Because of the potential effects on water quality and drinking water supply, any spill of hazardous materials in the CRW is not acceptable to SPU. The DEIS should include a discussion of how BPA proposes to avoid possibility of any spill. [SPU would require BPA to develop a project-specific Water Quality Control Program (WQCP) that will need to be approved by SPU and DOH.]

4.6.2.7 Species Listed and Proposed for Listing under the Endangered Species Act

"The Proposed Action could potentially impact chinook salmon, bull trout, and coho salmon. ...The level of these potential impacts would be high for the following reasons. First, the loss of LWD recruitment would be permanent and would affect streams that, by and large, already contain insufficient LWD."

River crossing will be minimally impacted by the construction of the new line. The line design includes taller, double-circuit towers on each side of the Cedar River. The tower design and location would reduce greatly the vegetation clearing required.

394-070 and -071 The discussion of wetland buffers within the Wetlands Technical Report (revised Appendix D) provides a brief overview of some of the functions provided by intact buffers. The purpose of this discussion is to outline general functional benefits from intact wetland buffers and not to detail the entire suite of buffer functions including benefits to water quality, water supply, stream temperature, bank stability, and the associated benefits for fish, amphibians, and other species. However, we do not feel it is necessary to collect or present additional information because it would not substantively contribute to the impact analysis, or the identification of potential impacts as required under the National Environmental Policy Act.

394-072 The DEIS did refer to the mapped, ancient deep-seated landslide which is on the southeastern flank of Brew Hill along the preferred Alternate 1 route (see Section 4.4.2). The DEIS also referred the reader to the technical appendix (Appendix F of the DEIS) for additional details regarding this landslide. The mapped, deep-seated landslide hazard along the Alternate 3 route in the Steele Creek basin is not referred to in the DEIS, but is discussed in the technical appendix. Evidence of recent or historical mass movement in these mapped, deep-seated landslide areas was not observed.

Several inner gorges are encountered along the alternative alignments where the alignments cross rivers or creeks. These areas are discussed as potential shallow landslide and soil erosion areas in the technical appendix. Roads and towers would not be placed on the steep slopes within these inner gorges. Instead, towers would be placed on the flatter slopes on either side of the gorges and the transmission lines would span these drainages. As a result, the potential for project-related landslides in these areas is remote.

Soil erosion is discussed in Section 4.4.1.1 of the SDEIS and in the technical appendix. Soil erosion BMPs are discussed in Section 4.4.2.1 of the SDEIS and in the technical appendix.

Second, in view of the low project area elevation, potential thermal effects could harm fish by causing thermal stress during low flows. Third, there would be little opportunity to mitigate these impacts, although impacts would be less for some streams than for others because in some settings relatively little vegetation clearing would be required."

394-088 | The DEIS concludes that the impacts are **high** but can not be mitigated. This is significant considering BPA's important responsibilities and commitments under the Endangered Species Act and Northwest Power Act to protect, mitigate, and enhance regional salmon runs. This conclusion also suggests the proposed action is unable to be compliant with the ESA and its regional implementation. The DEIS should disclose this situation and its associated consequences.

"... all streams in the project area are too warm to support bull trout spawning habitat."

394-089 | The DEIS should provide data or appropriate reference to support this contention.

4.6.2.12 Cumulative Impacts

"Cumulative impacts on fish and other aquatic resources are those impacts that act not only on the local area where the impact occurs, but at every point downstream that is influenced by the impact."

394-090 | This is an incorrect definition of cumulative impacts. The DEIS is describing indirect effects, not cumulative impacts. Cumulative effects are those effects from any number of sources within an area or watershed that are additive. One significant omission in this analysis, as mentioned in the review of the Fisheries Technical Report, is the lack of consideration of cumulative effects connected to the existing transmission ROW and the proposed ROW.

"Fine Sediment Load —...The sensitivity of a watershed to the cumulative effects of additional sediment load depends on the distribution of resources sensitive to fine sediment inputs, such as spawning beds, as well as the quantity and location of fine sediment sources, soils, slopes, vegetation cover, and flow regime. If the Proposed Action were implemented, fine sediment production would continue to be low."

394-091 | In general, most of Chapters 3 and 4 pertaining to fisheries, wildlife, vegetation, and wetlands are condensed versions of the text in the corresponding technical reports. This DEIS statement is an example of how condensing material for the DEIS from the Fisheries Technical Report resulted in an inadequate discussion of the issue. The first sentence fragment in this citation above describes the potential generic effects; the second concludes, with no supporting analysis presented, that the effects are low. In addition, as discussed in SPU's review of the Fisheries Technical Report, the analysis of sediment impacts is deficient.

LWD Recruitment

"... (which do not spawn in such warm streams)."

394-092 | The DEIS should provide data or an appropriate citation to support this contention.

Table 4-4

394-093 | This table contains incorrect information. For example, based on data provided in Burton (1999), the earliest confirmed sighting of Chinook salmon in the Cedar River is August 18. Based on data in Burton (1997), the latest recorded steelhead spawning is June 11, and the latest date of completion of steelhead

394-073 | See response to Comment 394-050.

394-074 | Comment noted.

394-075 | Since herbicides will not be used within the CRW, it is not possible for herbicides to contaminate the Cedar River. The statement in the EIS has been changed to reflect that.

394-076 | A site-specific Spill Prevention and Control (SPC) Plan will be prepared that covers the project scope of work (including equipment, materials, and activities).

This SPC Plan shall address the procedures, methods and equipment to prevent discharge of oil (i.e., petroleum products) into or upon the navigable waters of the United States. This SPC plan also shall meet the requirements of the State of Washington, which specify the spill response, cleanup, and disposal requirements of oil. In addition, BPA requires that this SPC Plan be prepared to include all hazardous substances (including oil and other petroleum products) associated with the scope of work.

394-077 | Section 4.2 of the Fisheries Technical Report (Appendix A) describes operations and maintenance impacts of Alternative 1 (the Proposed Action).

394-078 | Cumulative impacts of vegetation clearing are described in Section 4.1.3 of the Fisheries Technical Report (Appendix A).

394-079 | Please see response to Comment 382-017.

394-080 | Comment noted. BPA has sited the proposed transmission towers and access/spur roads to avoid streams, wetlands and riparian areas. While none of these facilities would be located in these sensitive areas, some clearing would be required in wetlands and riparian areas particularly where those areas are found within the proposed right-of-way. Table 4-5 displays information on the amount of riparian vegetation that may be cleared. BPA would attempt to minimize the amount of clearing in riparian areas.

394-094 spawning is August 11. The DEIS and its environmental analyses should be based on correct information on the affected natural resources. This table should be revised to include correct information. Also, this or another table should address lamprey species in the same manner. (Burton, Karl. 1997. Cedar River steelhead monitoring program annual report. Seattle Public Utilities.) (Burton, Karl. 1999. Temporal and spatial distributions of Cedar River Chinook salmon spawning activity. Seattle Public Utilities.)

Section 4.7 Wildlife
4.7.1 Impact Levels

394-095 The DEIS and its technical appendix should address impacts from changes in behavior of species (e.g., travel barriers, dispersal barriers).

4.7.2.3. Bird Collision

394-096 Though the incidence of electrocution on transmission lines is low, it should be discussed and thoroughly evaluated. The DEIS should commit to a monitoring and adaptive management program to evaluate bird mortality by both collision and electrocution. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

Table 4.5
Aquatic Communities

394-097 Totals do not match the values listed. Values given for wetlands are inconsistent with the values presented in Table 5 of Appendix B. The DEIS, its technical appendices, and associated permit documents need to present a complete, accurate, coherent, and consistent description of the proposed action.

4.7.2.5 Forest Community Dependent Species

“... both band-tailed pigeon and blue grouse....”

394-098 Ruffed grouse nesting and foraging habitat would be more impacted in most of the project area at such low elevations than that of blue grouse. Elevation range use needs to be checked and clarified for these species and a correct analysis presented in the DEIS.

4.7.2.13 Mitigation

394-099 Though most of the impacts to wildlife were described as moderate, mitigation proposed was generally simply minimization of the impact. This is insufficient mitigation for moderate levels of impact. Compensatory mitigation should also be included.

Bird Collision

“Provide bird marking in known flight corridors.”

394-100 The DEIS presents insufficient information for reviewers to effectively evaluate this method. The DEIS should disclose known flight corridors, and needs to add compensatory mitigation actions for mortality.

394-081 BPA is working with SPU to assure that all activities on the Watershed meet SPU standards to the extent practicable.

394-082 At the time the Fisheries Technical Report (Appendix A) was prepared in late 2000, the Final Cedar River Watershed HCP (City of Seattle 2000) was not yet available to the public, in spite of the fact that the HCP had been approved by the Seattle City Council in April 2000. The Final HCP has since become available. The findings reported in the Fisheries Technical Report were revised to be consistent with the Final HCP. Text in the SDEIS was changed to reflect these revisions.

394-083 See response to Comment 394-081.

394-084 An undetermined number of new cross drain culverts will be installed and we will be replacing other culverts of this type. BPA acknowledges that there are problems associated with some of its existing culverts on its access roads on the Raver-Echo Lake right-of-way within the Cedar River Watershed. BPA is committed to addressing these problems with SPU, the landowner, and the Washington State Department of Fish and Wildlife.

394-085 See response to Comment 394-081.

394-086 See response to Comment 394-081.

394-087 Comment noted. Please see response to Comment 394-076.

394-088 BPA has included more information concerning potential impacts to endangered species in the SDEIS. The commenter states that the DEIS concludes that the impacts are high but cannot be mitigated. BPA respectfully disagrees with the commenter's interpretation. The DEIS makes it clear that two of the three waterways which may potentially provide habitat to listed fish in the future (once the proposed downstream fish ladder is completed thereby opening up the Cedar and Raging rivers to migration), would have low impacts. A third waterway, the Cedar River, may have high impacts if large conifers were cut and removed, but this would not be needed. There are currently no listed fish in the project's action area, and during construction no trees will be cut near the Cedar River.

- 394-101 | Several raptor species utilize ROW corridors. The DEIS should commit to the use of all available types of structural modification(s) for lines and towers that prevent and/or minimize negative impacts to any avian species over the full extent of the ROW (inside and outside of the CRW).
- Forest Community Dependent Species*
- 394-102 | The DEIS should commit to including snag-creation mitigation along the edges of the cleared ROW to create nesting and foraging habitat for snag-dependent forest species.
- Riparian Community Dependent Species*
- "Span riparian corridors to the extent possible..."*
- 394-103 | The DEIS should identify streams on which this is possible, so reviewers can evaluate potential impacts.
- 4.7.2.14 Cumulative Impacts**
- 394-104 | The DEIS classifies cumulative impacts as "low," with little or no data to support this conclusion. The DEIS should present data and a complete analysis of cumulative impacts.
- "The HCP also outlines plans to close certain roads within the CRW..."*
- 394-105 | It is inappropriate for BPA to be allowed "mitigation credit" for road decommissioning contained in the HCP and accomplished by the City of Seattle. See additional comments elsewhere in this comment letter.
- 4.8 Vegetation**
- "BPA is collecting data and analyzing the feasibility of using a different clearing criteria within the CRW that would take fewer trees..."*
- 394-106 | This evaluation should be completed and included within the DEIS so reviewers can evaluate the actual impacts of tree removal and habitat conversion within CRW, rather than simply in the final EIS. . Further, the criteria used for evaluation should be made explicit so that review of how tree removal would occur could be technically evaluated.
- Tables 4-6 and 4-7*
- 394-107 | The relationship between the acreage shown in these tables is not clear. For example, mid-seral was defined as in the range of 15 to 35 years, but the total mid-seral acreage for the proposed action in Table 4-7 (26 ac), is not equivalent to the 10-35 year age category in table 4-6 (0 ac). The DEIS, its technical appendices, and associated permit documents need to present a complete, accurate, coherent, and consistent description of the proposed action and its impacts.
- 4.8.2.3 Operation and Maintenance Impacts**
- "This is a low impact because it could be mitigated."*
- 394-108 | The DEIS should describe how this impact will be mitigated.

Concerning the comments on the ESA, BPA fully intends to fully comply with its obligations under the Endangered Species Act. After submitting a biological assessment to the U.S. Fish and Wildlife Service, FWS concurred with BPA's "not likely to adversely affect" determination on the bull trout, marbled murrelet, bald eagle, grizzly bear, gray wolf, and Canada lynx and did not identify any other federally-listed endangered species that would be adversely affected by the project. Consultation on the spotted owl will be completed prior to construction.

With respect to the NMFS, we received letters from them stating that they expect the effects of the Proposed Action to be discountable or insignificant. Their letters announce the conclusion of our informal consultation with them in accordance with 50 CFR 402.14(b)(1) (see Appendix U of the SDEIS and FEIS).

- 394-089 | No bull trout spawning areas have been identified in western Washington at elevations of less than 2,000 feet (King County Department of Natural Resources, 2000). See Section 4.1.3.1 of the revised Fisheries Technical Report (Appendix A).
- 394-090 | The analysis of cumulative impacts has been changed in the SDEIS. The beginning of Chapter 4 includes the definition of cumulative impacts and lists the foreseeable future actions that were considered in estimating cumulative impacts to individual resources.
- 394-091 | The Fisheries Technical Report (Appendix A) was included as an appendix to the DEIS because the EIS is written, according to CEQ regulations, in plain language the public and decision-makers can understand. The full findings of the analysis are in the technical report so that reviewers interested in the details of the analysis can read them. The DEIS contained sufficient information to assess the potential impacts of the Proposed Action in accordance with NEPA requirements.
- 394-092 | See response to Comment 394-089.
- 394-093 and -094 | Table 5 of the Fisheries Technical Report (Appendix A) has been revised to include this information. Information on the lamprey is outside the scope of this project.

4.8.2.4 Mitigation

"BPA would consult with the DNR, SPU, and other"

394-109 | This list should include the U.S. Forest Service.

"Management practices regarding noxious weed control... have been defined in the BPA Transmission System Vegetation Management Program."

Given that the DEIS acknowledges the current ROW has extensive invasion and occupation by noxious weeds, the current policies and procedures appear to be inadequate. See additional comments on noxious weed management elsewhere in this comment letter.

394-110 | *"Areas would be maintained using a combination of manual methods and herbicides.... No herbicides would be used in the CRW."*

The DEIS should present much more detail on how BPA intends to eradicate noxious weeds in CRW. See additional comments on noxious weed management elsewhere in this comment letter. Data on the success or failure of the proposed methods in other areas should be included so reviewers can adequately evaluate the proposal and its likelihood of success.

"The Muckleshoot Tribe would like the opportunity to salvage or relocate plants before construction."

394-111 | Is this a commitment to allowing the Muckleshoot Tribe to do this? What, if any, limitations would be placed on this? Would entire trees be given to the tribe? What input would the landowner have? The DEIS should explicitly describe these activities.

"These are also measures that the Muckleshoot Tribe would like in included as mitigation:"

394-112 | Is this a commitment to include these proposals as mitigation? The DEIS should explicitly describe these measures and be clear regarding BPA's commitment to use them as mitigation.

Section 4.9 Wetlands

4.9.2 Proposed Action

"BPA would avoid crossing wetlands where possible, and where impacts are unavoidable, BPA would use best management practices to minimize destruction or denigration of the wetland to the maximum extent practicable."

394-113 | This is a misleading statement. The alternatives were not chosen to avoid wetlands, and any wetlands in the path of these ROWs could not reasonably be avoided. The DEIS should acknowledge that this was the case, and should properly evaluate realistic potentials for avoiding wetlands and riparian zones. The DEIS statement that BMPs would be used to minimize wetland impacts is not adequate for effective evaluation of the proposed action.

394-095 Section 4.1 of the Wildlife Technical Report (Appendix B) was revised to include a more detailed analysis about the issues of travel or dispersal barriers and how it affects the behavior of animals. More information was added to the SDEIS.

394-096 Section 4.1 of the Wildlife Technical Report (Appendix B) was revised to include a more detailed analysis about the issues of collision and electrocution. Additional information has been added to the SDEIS. Electrocutions associated with high voltage transmission lines are extremely rare. BPA is currently helping to develop improved technology for monitoring bird collisions in cooperation with the Edison Electric Institute. BPA is providing funding and expertise in a study to test a bird strike indicator, a device clipped onto overhead ground wires to monitor and store impacts with the wire. Some of these devices are being tested in areas of known bird strikes that have been previously studied in the Audubon Wildlife Refuge in North Dakota. If they prove to be a useful tool, these devices will be placed for monitoring in the areas identified as having the highest need.

394-097 Tables were double-checked, totals verified, and changes were made as needed.

394-098 Although ruffed grouse are likely to be present in the project area given the habitat types available, they do not meet any of the criteria for inclusion in the analysis, as described in Section 3.3.2 of the Wildlife Technical Report (Appendix B), and so were not included in the analysis. Blue grouse do meet the criteria, as a species of local concern, and because the habitat modeled for this species by Smith et al. (1997) for the Washington State Gap Analysis included mixed and coniferous forest habitats at all elevations, this species was included as potentially occurring in the project area.

394-099 Comment noted. Please see response to Comment 340-002.

394-100 BPA knows of no mortality issues involving avian species with its existing Raver-Echo Lake power line in the project area; however, the existing line has no overhead ground wire, and the proposed line would contain an overhead ground wire over the length of the project. To mitigate for the potential for collision

Table 4-10

394-114 | Acres in this table do not agree with those in the corresponding Table 2 in the Wetlands Technical Report. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, coherent, and consistent description of the proposed action.

"Construction would include clearing shrubs, trees, and herbaceous vegetation from wetlands and wetland buffers."

394-115 | The DEIS should describe the justification and/or reason for clearing all shrubs and herbaceous vegetation from wetlands and wetland buffers, as is indicated by this statement.

"Wetland Vegetation Impacts —Overall impact on wetland vegetation would be moderate."

394-116 | As pointed out in the SPU comments on the Wetlands Technical Report, conversion of forested wetlands to scrub-shrub or emergent wetlands constitutes a **high** impact, according to definitions used for analysis (impairment of ecological integrity). The DEIS and its analysis should be corrected to reflect this.

Wildlife Impacts

394-117 | The DEIS should address impacts to amphibians.

4.9.2.4 Mitigation

"Standard mitigation measures to minimize wetland impacts include the following:"

394-118 | That is a true statement, but the DEIS should commit to implementing even these minimal mitigation measures. These measures alone cannot mitigate for the unavoidable impacts to wetlands that will occur.

4.12 Cultural Resources

394-119 | Some areas in the project area and within the CRW have a high likelihood of containing cultural resources or Traditional Cultural Properties, and thus potential for significant impacts. The DEIS omits specific results of archaeological and CMT surveys that have been conducted for this project. Survey results should have been considered in the DEIS. The technical report for this discipline should have been included in the DEIS. The DEIS should have included proposed mitigation actions for any identified sites (if any). Also, the DEIS should recognize that SPU has archaeological standards for the CRW that need to be (and were) followed.

The DEIS's assertion that impacts will be "low" for the proposed action are unsupported by the existence of substantial uncertainty regarding impacts on archaeological resources or Traditional Cultural Properties, for which no assessment has been completed. Given the location of the project, these impacts could be significant. The DEIS should explain this uncertainty, qualify the description of impacts, and provide the needed information for public review.

4.13 Noise, Public Health, and Safety

394-120 | The DEIS does not address the impact of anticipated increases in noise on wildlife populations. Also, the DEIS needs to discuss how the new transmission line will interfere with CRW staff radio usage and reception.

with the overhead ground wire, BPA would install bird flight diverters over the Cedar and Raging rivers as a part of the project. This apparatus should allow any birds using these wildlife corridors to see the overhead ground wire and avoid the potential for bird strike. BPA believes avoiding the potential for mortality is preferable to offering compensatory mitigation for its occurrence.

394-101 | With the exception of installing bird flight diverters on the overhead ground wire over the riparian areas of the Cedar and Raging rivers, no alterations would be made to the proposed structures or line configurations to prevent and/or minimize negative impacts to any avian species in the area since none would be necessary. Since the proposed conductors would be spaced a minimum of 21 feet apart, it would be unlikely that any bird could come in contact with two conductors at the same time, thus avoiding any potential for electrocution. And raptor collisions with power lines are relatively rare. For more information, please see Section 4.1.1 of the revised Final Wildlife Technical Report, entitled "Impacts common to All Transmission Line Alternatives" in Appendix B.

394-102 | The details about these mitigation measures will be included in the Mitigation Action Plan for this project. We will include leaving existing snags and the creation of new snags to both preserve existing habitat and the creation of new wildlife habitat, where possible.

394-103 | The location of towers and access roads have been developed to help reduce the amount of riparian vegetation impacted.

394-104 | The cumulative effects analysis was updated in the SDEIS. Section 4.7.2.11 discusses cumulative effects associated with the Proposed Action. Table 4-9 in the SDEIS displays potential cumulative impacts for each of the alternatives. Although BPA would require additional access roads, SPU is planning on obliterating some of its current access roads. BPA has acquired a 352-acre parcel of land north of the CRMW to prevent future development (except for the Proposed Action and future transmission lines) as mitigation for the forestland that would be impacted by the Proposed Action. See also response to

394-121 In its scoping letter, SPU identified the need for BPA to address effects of the project on the drinking water supply. The DEIS completely fails to discuss the risks to the drinking water supply during project construction for any of the alternatives. These risks include the risk of spills that could contaminate the water and the risk of turbidity events that could have serious regulatory and public health consequences for SPU. See also SPU's comment under Environmental Consultation, Review, and Permit Requirements, immediately below.

CHAPTER 5—CONSULTATION, REVIEW AND PERMIT REQUIREMENTS

394-122 The DEIS should include a new section on the Washington Department of Health (DOH) Rules for Group A Public Water System (246-290 WAC). This section would summarize the federal Safe Drinking Water Act and subsequent regulations that require a high level of protection for a source of unfiltered drinking water such as the Cedar River. Because SPU's Cedar River source is unfiltered, SPU is required to control the watershed in accordance with a DOH-approved control program. Obviously, the currently approved control program does not address BPA's proposed project. For previous construction by SPU and SCL in the watershed, SPU required development of a project-specific Water Quality Control Program (WQCP) that could be approved by DOH as a supplement to the permanent control program. Typically, the program was prepared by a specialty sub-consultant in the consultant design team. SPU would require BPA to produce a WQCP for this project that would be acceptable to SPU and DOH.

5.2.1 Federal list

394-123 The DEIS incorrectly states that marbled murrelet is not expected to occur in the project area. Murrelets have been detected in the upper watershed, where they are possibly breeding, and can be expected to fly along the Cedar River to these areas. Thus, this species is at risk of colliding with power lines in the CRW. The DEIS should acknowledge this and provide a suitable analysis of impacts.

5.4 Heritage Conservation

394-124 The DEIS states that no culturally modified trees were found in the project area, but SPU believes that the Muckleshoot Tribe may have observed some of these in the project area. [Contact Tom Minichillo.]

5.5 Federal, State, Areawide, and Local Plan and Program Consistency

394-125 As previously mentioned, the DEIS fails to mention how BPA intends to meet the intent of local sensitive areas regulation such as King County Sensitive Areas Ordinance. BPA is required to meet the standards in this ordinance, which would not occur under measures describe in the DEIS. The DEIS should acknowledge this requirement and indicate how it will so meet the intent of such local and state regulations.

5.5.9 City of Seattle Cedar River Watershed Habitat Conservation Plan

394-126 The DEIS should acknowledge this proposed action is not a "covered activity" under the HCP (the primary land management document/direction in the project area) and then commit to not diminishing the conservation commitments in the HCP. The DEIS should explicitly describe how it intends to avoid diminishing HCP conservation commitments (for example, by committing to providing appropriate and effective compensatory mitigation).

5.17 Underground Injection Permits under the Safe Drinking Water Act

Comment 340-002. For these reasons, the cumulative impact of the Proposed Action is low to moderate.

394-105 Comment noted. BPA agrees.

394-106 See response to 366-002. We will be using a stable tree criteria.

394-107 Table 4-6 from the DEIS has been deleted. See Table 4-10 in the SDEIS.

394-108 Mitigation for soil disturbance and the possibility of introduction of noxious weeds would include any or all of the following:

- Reseeding disturbed areas with a seed mix acceptable by BPA and SPU;
- Washing of construction and maintenance vehicles to prevent spread of seed from one source to another;
- Treatment of known noxious weeds through manual or mechanical measures.

394-109 Comment noted. The statement has been revised in the SDEIS.

394-110 See response to Comment 382-017.

394-111 BPA has been meeting with the Muckleshoot Culture Committee on the proposed project since early 2000. One of the Tribe's chief concerns is what impact the proposed project would have on cultural resources important to the Tribe. BPA is working with the committee to site the proposed project with the least impact on cultural resources.

If BPA were to decide to construct the proposed project, BPA would obtain land rights from the property owners to do so, including Seattle Public Utilities. BPA obtains easement rights to construct, operate and maintain its transmission facilities; however, the land within the right-of-way remains in fee ownership of the property owner. Although BPA has offered to move its facilities, given certain constraints, to avoid cultural resources, the Tribe needs to work with the landowner regarding harvesting any resources important to the Tribe.

394-112 BPA would commit to these mitigation measures. With respect to the noxious weed issue, BPA is willing to work with the

"none of the alternatives would...adversely affect any surface water supplies"

394-127 |

This statement ignores the role of CRW in providing drinking water for 1.3 million people. The DEIS should correct this section to reflect this reality.

landowner in controlling noxious weeds on BPA's existing right-of-way attributable to BPA's actions or inactions, as well as to prevent the proliferation of noxious weeds on the proposed right-of-way within the CRW that would also be attributable to BPA actions or inactions. Preventing the spread of noxious weeds is an ongoing maintenance objective of BPA, but it must be undertaken in concert with landowner help, particularly where the noxious weed problem exists adjacent to BPA's rights-of-way as well.

- 394-113 BPA has sited all of its facilities, tower sites, access roads and substation expansion to avoid filling any jurisdictional wetlands. Although approximately 14 acres of forested wetlands would be converted from forested wetlands to scrub/shrub wetlands, this clearing would be undertaken by hand clearing only. No mechanized land-clearing equipment would be allowed in these wetlands. BPA believes in avoidance first, minimization next and then providing compensatory mitigation where necessary.
- 394-114 Additional information was developed for the draft EIS after the Wetlands Technical Report was prepared. The most recent information was included in the SDEIS.
- 394-115 The sentence was changed.
- 394-116 Please see response to Comment 394-029.
- 394-117 Impacts to amphibian habitat are described in Section 4.1.2 of the Wildlife Technical Report (Appendix B), with habitat loss expected to be the major potential impact for these species.
- 394-118 Please see response to Comment 340-002.
- 394-119 Please see response to Comment 394-016.
- 394-120 With respect to construction noise, the Muckleshoot Culture Committee has expressed a concern about construction noise impacts on fawning and calving by the deer and elk populations within the CRW. By the time BPA would initiate construction activities (in August), the deer and elk-birthing season would have ended. Our understanding is that fawning and calving are usually completed by June 15th. BPA will do its

best to honor this request while still trying to have the line energized when it would be needed. The construction noise would be considered short-term and intermittent, and would occur only in specific locations until the project would be completed.

Regarding operation noise, Section 4.13.1 of the DEIS entitled “Predicted Audible Noise Levels” stated that the incremental noise contributed by the proposed line adjacent to the existing Raver-Echo Lake 500-kV line would only be about 1 dBA at the edge of the proposed right-of-way and would not be discernible. Wildlife such as deer and elk commonly use BPA rights-of-way to browse, and do not appear to be affected by the corona-generated audible noise.

With respect to the concern as to the potential effect of the new transmission line on CRW staff radio usage and reception, the DEIS, Section 4.13.5 entitled “Radio Interference” stated that the project’s overall radio interference is expected to be minimal.

- 394-121 Please see responses to Comments 394-051, 052, 053, and 054.
- 394-122 Information has been added to Chapter 5.
- 394-123 See response to Comments 394-096 and 394-066. The preferred power line route does not affect suitable nesting habitat for the marbled murrelet and will parallel the existing corridor, which substantially lessens any increase in risk associated with the new line. No noise disturbance associated with this project would be conducted within 0.25 miles of suitable or occupied habitat. Therefore, the project is not expected to increase the potential for incidental take.
- 394-124 A survey for culturally modified trees was conducted on and off the Cedar River Watershed. No culturally modified trees were found.
- 394-125 BPA intends to abide by the King County Sensitive Areas Ordinance including providing compensatory mitigation for altering forested wetlands within the proposed right-of-way. However, BPA disagrees with the commenter’s statement that

BPA is required to meet the standards in this ordinance. See also responses to Comments 395-018, -019, and -020.

- 394-126 The DEIS states (on Page 5-16) that the HCP covers only actions by the City of Seattle and activities undertaken by other agencies (such as BPA) within the CRW are not addressed by the HCP, and therefore, require separate review by USFWS and NMFS. The DEIS also stated “The BPA is consulting with both the FWS and NMFS to ensure compliance with the HCP.” See also Appendix U in the SDEIS and FEIS, and Appendix AA of the FEIS for the agencies’ opinions that the proposed project would not adversely affect the HCP.

Furthermore, BPA has purchased land to be used a compensatory mitigation to replace that which would be lost should BPA acquire land rights to site its transmission line through the CRW. Additional mitigation is under negotiations.

- 394-127 Construction and operation of the proposed BPA transmission line would not require the underground injection of water or wastes. BPA would comply with applicable regulations of federal, state and local agencies to protect drinking water supplies, in particular, Seattle Public Utilities, Washington State DOH, and the Cedar River Watershed, which provides drinking water to 1.3 million people.

**Kangley-Echo Lake Transmission Line Project DEIS
Appendix A – Final Fisheries Technical Report**

**Summary of Major Comments to Appendix A – Final Fisheries Technical Report
Seattle Public Utilities
September 4, 2001**

GENERAL COMMENTS

1. The analysis in the DEIS and technical appendix is inadequate due to:
 - lack of assessment of Type 4 and 5 streams;
 - factual errors
 - lack of thorough erosion assessment
 - scant site-specific information on streams and no quantification of impacts by stream crossing
 - lack of disclosure as to the extent of clearing in riparian areas, which effectively precludes an evaluation of project effects
2. The DEIS and technical appendix should commit to compensatory mitigation in acknowledgment of the project's moderate to high impacts to fish habitat.
3. The DEIS and technical appendix should thoroughly address cumulative effects of creating additional ROW adjacent to the existing ROW.
4. The DEIS and technical appendix should discuss steelhead trout in greater detail throughout.

SPECIFIC COMMENTS

DEIS Appendix citations in italics; SPU comments in normal font.

1.0 Executive Summary

"This report describes the existing conditions and potential impacts on vegetation"

394-128

This is the fisheries technical report.

"This report serves as the primary basis for the vegetation"

This is the fisheries technical report.

1.1.1.2 Clearing

"Non-merchantable timber may or may not be burned"

394-129

This statement conflicts with the project's Biological Assessment (BA), which claims there will be no burning. The DEIS, its technical appendices, and associated permitting documents need to present a complete and consistent description of the proposed action.

This activity, if allowed within Cedar River Watershed (CRW), would be with the approval of SPU relative to scheduling and methods. The DEIS and technical appendix should commit to ensuring all methods proposed in this section would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

"... (BMPs) for timberland would also be used."

394-128 This change has been made in Section 1.0 of the Fisheries Technical Report (revised Appendix A).

394-129 Because the Biological Assessment was prepared after the Fisheries Technical Report (Appendix A), it included mitigation actions such as avoidance of burning. The Fisheries Technical Report has been changed to reflect this new information. Because of the proximity of the adjacent 500-KV line that would remain energized during project construction, no burning would be allowed on the proposed right-of-way.

Additionally, burning would not occur at this project because the project is close to the Seattle-Tacoma CO maintenance area and the King County urban growth boundary. The state of Washington forbids burning in non-attainment and maintenance areas, and within the urban growth boundary. Additionally, the state forbids burning in any other area of the state when a reasonable alternative to burning is found to exist (WAC 173-425-040). According to the state, reasonable alternatives include chipping, woodwaste recycling, and landfilling. Rather than burn, BPA would pursue these alternatives. BPA typically does not burn slash and tries to avoid such practices not only for air quality reasons, but because soot from fires can cause flashovers from one transmission line to another, resulting in outages. This information was included in Section 4.14, Air Quality, of the DEIS.

394-130 BPA is committed to using Best Management Practices. See response to Comment 394-081.

394-131 See responses to Comments 366-002 and 382-009.

394-132 Section 5.15 of the SDEIS describes how BPA intends to meet Clean Water Act requirements. The Stormwater Pollution Prevention Plan (SWPPP) will describe in detail actions that will be taken to limit erosion impacts. Section 4.6.2.10 describes specific mitigation that will be undertaken to lessen impacts to fisheries. BMPs would include silt fences and hay bales and other such means that the contractor would use to keep sediments from reaching surface waters. The contractor is responsible for identifying which specific BMPs would be used to meet resource protection goals.

- 394-130 | The DEIS and technical appendix should commit to ensuring all methods proposed in this section would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

"Trees would be cleared within the ROW as well as outside of the ROW to prevent trees from falling on the lines."
- 394-131 | SPU is unable to comment effectively without more specific tree removal plans. Also, there is no mention of the temporary 50 ft construction easement BPA previously mentioned in this technical appendix (but which is not mentioned in the DEIS). The DEIS and technical appendices need to speak consistently on the nature of project features.

"Additional BMPs for timberland would also be used."
- 394-132 | What BMPs will be used? The DEIS and the technical appendices need to present a complete and accurate analysis of fisheries and potential impacts, which is related, in part to the disclosure of the BMPs to be used.

*"Total amount of clearing [for towers] for this project is unknown at this time."
"An additional amount of land would be cleared for roads that are needed off the ROW and for roads to be in poor condition and requiring upgrading by BPA"*
- 394-133 | SPU can not comment effectively without more specific information about grading plans. As evidenced by information presented in the project's BA, BPA has identified locations for towers and new roads and so should be able (in the DEIS and its technical appendices) to estimate the total amount of clearing for the proposed action. The DEIS and the technical appendices need to present a complete and accurate environmental analysis, which includes the disclosure of such known project characteristics. Also, The DEIS and technical appendices should commit to ensuring all methods proposed in this section would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

1.1.1.3 Access Road Construction and Improvement
- 394-134 | The DEIS and technical appendix should commit to ensuring all methods proposed in this section would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

"Access roads would be 16 ft wide, with additional road widths of up to 20 ft for curves."
- 394-135 | SPU believes these road widths are excessive. The DEIS should explain and justify these road prism dimensions. SPU can not comment effectively without more specific information about road plans. As evidenced by information presented in the project's BA, BPA has identified locations for new roads and so should be able (in the DEIS and its technical appendices) to firmly estimate the total amount of clearing/road-building for the proposed action.
- 394-136 | The DEIS and the technical appendix fail to present a complete and accurate environmental analysis because they fail to disclose such known project characteristics as location and kinds of roads. Road locations depicted in the BA are often distant from the proposed action. The DEIS and technical appendix should explain and justify the location of these roads. The DEIS and the technical appendix should acknowledge that all road plans affecting the CRW would be subject to SPU review and approvals.

*"...roads would be constructed and used outside the ROW."
"Where temporary roads are used...."*
- 394-137 | SPU can not comment effectively without more specific information on road plans. As evidenced by information presented in the project's BA, BPA has identified locations for towers and new permanent and temporary roads and so should be able to firmly estimate the total amount of clearing for the proposed action.

- 394-133 | Information not available when the DEIS was published has been added to the SDEIS.
- 394-134 | Comment noted. See response to Comment 394-081.
- 394-135 and -136 | BPA has committed to helicopter construction to reduce the standard of road needed for construction. Access road design in the CRW is described in Section 2.1.1.5 of the SDEIS.
- 394-137 | See responses to Comments 394-135 and 136.
- 394-138 | See responses to Comments 394-135 and 136.
- 394-139 | When establishing hazardous materials, equipment, and fueling staging areas, consideration will be given to minimizing the removal of existing trees and minimizing compaction of native soils except as needed. Staging areas will not be located adjacent to sensitive areas, buffers, and waterways. After consultation with SPU, major hazardous materials and fueling staging areas will be located outside of the CRW. Mobile fueling pads will be used sparingly within the CRW and only as absolutely necessary to proceed with work in a safe and efficient manner.

Hazardous Material Staging Area. Drums of diesel and gasoline, and small containers of diesel, gasoline, oils, hydraulic fluid, and decontamination/cleaning solutions will be stored on weather-resistant (i.e., hooded) spill containment pallets or specifically constructed spill containment sheds. Spill containment pallets or shed containment will be able to contain 110 percent of the largest container. Hazardous materials and chemicals shall be clearly labeled and segregated based on compatibility. Hazardous materials and fuel storage areas shall be designed in a manner that these areas can be secured and/or locked at the end of each workday. Only authorized personnel will be permitted to enter these areas. All products shall be clearly labeled and lids securely fastened. All storage tanks shall be kept off of the ground.

Fueling Staging Area. The fueling staging area shall consist of a spill pad and fuel tanks (diesel and gasoline). Temporary barriers will be used to prevent heavy equipment from damaging/

394-138 | The DEIS and the technical appendix need to present a complete and accurate environmental analysis, which includes the disclosure of such known project characteristics as location and types of roads.

1.1.1.4 Storage, Assembly, and Refueling Areas

394-139 | The DEIS and technical appendix should address the locations for these facilities as well as related clearing/land-disturbance impacts, their adjacency to sensitive areas, and containment and fire safety design. The DEIS provides no descriptions or specifications for refueling or hazardous materials storage areas, which prevents effective review of the proposed action.

All refueling and hazardous material usage/storage facilities would be required by SPU to be outside the CRW boundary. To protect the municipal water supply, SPU has “no-tolerance” objectives for spills or leaks of hazardous materials in the CRW. The DEIS and technical appendix should indicate how all spills would be prevented in the CRW.

1.1.1.5 Tower Site Preparation

“BMPs would be used during clearing and construction to reduce impacts.”

394-140 | The DEIS and technical appendix should describe what these BMPs include. The DEIS and technical appendix should commit to ensuring all methods proposed in this section would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

“An average area of 30,000 sq. ft. would be disturbed at each tower site. Additional areas that could be disturbed could include the site where the conductor is strung and pulled. These disturbances could be as large as 370 ft radius from the tower center.”

394-141 | The DEIS and technical appendix should disclose estimates of where grading will occur and how much area will be graded. The DEIS, its technical appendices, and associated permitting documents need to present a complete and consistent description of the proposed action.

“...construction crews would remove selected trees in a 50 to 60 ft wide area on each side of the ROW. (i.e. to compensate for or anticipate resulting blowdown after initial ROW clearing”

394-142 | The DEIS and technical appendix should describe volume or number estimates for tree removal in this 50 to 60 ft zone. The DEIS and its technical appendix need to present a complete description of the proposed action.

“...four footings been placed in holes that have been excavated, augured, or blasted.”

394-143 | Use of blasting is a concern in the CRW. The DEIS and technical appendix should describe the likely blasting plan and evaluate the impacts of blasting on stream and fish resources. The DEIS and its technical appendix need to present a complete description of the proposed action.

“Noise and dust would be generated....”

394-144 | The DEIS and its technical appendix need to evaluate the impact of noise and dust generation on the affected fish populations. The DEIS needs to present a complete description of the proposed action.

rupturing these tanks. The fueling pad shall be designed with impervious secondary containment capable of capturing any spills that may occur during fueling operations.

The bulk fuel storage area shall be designed with a temporary cover that also provides wind protection, and will have an impervious berm around the perimeter of the storage area. The bermed area should have a storage capacity of at least 110 percent of the largest container. The storage area shall be lined with a double layer of plastic sheeting or similar material.

Mobile equipment fueling pads. Construction equipment fueling on the ROW would use pickups with saddle-mounted tanks in their beds over portable chemically compatible secondary containment systems. Sorbent materials shall be used to protect the fueling nozzle as it is transferred to and from the fueling cradle and the vehicle being fueled. Pickup beds will be sealed to prevent any leakage. Fueling will only occur in designated fueling areas. Fuel tanks are not allowed to be topped off. All equipment fueling operations shall use pumps and funnels and absorbent pads. All fueling vehicles would leave the CRW daily. All fueling operations personnel shall be trained in SPCC procedures.

Hand-carried Equipment. Fueling of hand-carried equipment shall only take place in a mobile secondary containment system consisting of a covered truck with a sealed bed and lined with an appropriate chemically impervious material. All gas cans would be stored and hand-carried equipment fueled in this area. The transfer of fuel into portable hand-carried equipment would be performed using a funnel and/or hand pump. The fueling system and transport cans would be inspected daily. All fuel storage containers would be stored in a manner that reduces the possibility of spills. Gas cans would not be allowed outside of the secondary containment area. All hand-carried equipment fueling vehicles would be removed from the CRW at the end of each day.

Spill Prevention. Spill response kits will be located in the fueling area for easy access. The spill response kits at a minimum will include chemical resistant “zip-seal” storage bags, plastic sheeting, plastic drum liners, sorbent sheets, sorbent

1.1.1.9 Site Restoration and Clean-up

"..... pull site locations would be reshaped and ..."

394-145 | The DEIS and technical appendix should describe what "reshaping" will include. Reshaping should include considerations for proper drainage.

".... Access roads would be repaired."

394-146 | The DEIS and technical appendix should describe what "repair" means.

"... reseeded with grass or an appropriate seed mixture ..."

394-147 | The DEIS and technical appendix should commit to ensuring all methods proposed in this section would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW. Seed mixes should be composed of native seed species (i.e., grasses and shrubs) and meet SPU approval.

1.1.2.6 No Action Alternative

394-148 | The DEIS and technical appendix should provide data and/or references documenting how this conclusion was reached.

1.2 Key Issues for Fisheries

394-149 | The DEIS and technical appendix should address adverse impacts on habitat for coho salmon.

"Under the HCP, all forest clearing is prohibited except for purposes of habitat restoration."

394-150 | This statement is incorrect. The DEIS and technical appendix should restate and clarify this concept relative to the final version of the HCP (2000).

1.3 Major Conclusions

"All action alternatives would have similar impacts to fish and their habitat. All action alternatives would require removal of riparian forest vegetation in an area where such activity has previously been determined to cause adverse effects to fish species listed as threatened under the ESA. Although some measures could be taken to minimize vegetation clearing in riparian areas, the residual impacts would persist throughout the life of the project."

394-151 | This comment and the statement on page 23 (paragraph 5) of the technical appendix indicate impacts to ESA-listed fish species would be high. Despite these adverse impacts to listed fish, the DEIS and its technical appendix contain no substantive commitment to compensatory mitigation. Is BPA's conclusion, then, that there are no mitigation actions available that would reduce adverse effects of riparian vegetation clearing on ESA-listed fish to negligible levels? The DEIS and technical appendix should fully disclose this conclusion.

The DEIS and technical appendix should define what measures "could be taken" and what "methods are available."

2.1 Data Sources and Study Methods

"The CRW HCP (City of Seattle 1998)"

booms/socks, granular oil sorbent, shovels, and overpack/salvage drums. Any spills shall be cleaned up immediately and the contaminated material properly disposed of. Accumulated storm water in secondary containment vessels shall be collected and disposed of properly. Additionally sediments and sediment-laden water containing oil on the construction site shall be captured and managed properly.

Additional spill prevention procedures will include daily and weekly inspections to ensure that spill controls are in place and remain effective. Any leaks from a fuel tank, equipment seal, or hydraulic line will be contained within a spill pad placed beneath potential leak sources. An undetected leak from parked equipment will be contained within the equipment staging area and cleaned up upon discovery. In addition to inspections, employees shall be trained on spill source and receptor recognition, spill prevention planning, spill prevention techniques, spill response measures, and spill reporting protocol. All employees are responsible for spill prevention and will respond to a leak as appropriate based on their level of training, or if a spill has occurred, they will assume a defensive posture and immediately notify the designated person responsible for assessing spills, implementing the SPC plan, and contacting regulatory agencies. Should the on-site personnel not have the training, equipment, or materials to clean up spills, a spill response contractor will be used.

Fire Safety. Fire extinguishers shall be located adjacent to spill kits in the material, equipment, and fueling staging areas. Smoking will not be allowed in construction and fuel staging areas and during re-fueling procedures. Smoking will only be allowed in designated areas. The Contractor must comply with forest fire laws, rules and regulations of the State of Washington (e.g., RCW 76.04 and WAC 332-24 and WAC 332-24-405 Spark Emitting Equipment Regulations). Construction operations are subject to daily state fire precaution levels (FPL). The Contractor will need to check the level each day. The operators also need radio or telephone communications to report a fire. Vehicles will be equipped with fire extinguishers and spark arrestors. The local fire department is responsible for emergency containment procedures when called to the site. The fire department takes measures necessary to prevent fire

394-152 | In section 1.2 above, City of Seattle 2000 is referenced, but it is not included in this list. This section and any other references to the HCP should be revised, updated, and clarified throughout the DEIS and its technical appendices to reflect content of the final version of the HCP (2000).

"The impact assessment for this analysis relied upon remote methods to identify potential fish-bearing streams...."

394-153 | The known distribution of fish in the project area should be used in the analysis wherever it confirms a greater distribution than the remotely sensed data indicates. Some stream reaches that contain fish are not indicated as such in the analysis. Consultation with SPU Cedar Falls biologists may be beneficial. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

"The GIS database was not found to include any non-fish-bearing streams, so these streams were not inventoried. It is assumed that the project area contains at least twice as many non-fish-bearing streams as fish-bearing streams."

394-154 | It is well-known that non-fish bearing streams (Types 4 and 5) have a water quality impact on downstream reaches that are fish-bearing. The CRW HCP has a standard of 150 ft buffer for clearing on Type 4 and 100 ft for Type 5. Lack of inventory of Type 4 and 5 streams and lack of impact analysis on these streams are significant deficiencies in the DEIS and this technical appendix. The DEIS and technical appendix should inventory Type 4 and 5 streams and consider the potential impacts of the proposed action on these stream and fish resources. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

"Color aerial photographs were reviewed to collect information about the size and species composition of riparian vegetation, and the existing riparian shade, along all potentially affected streams. This review used methods established for watershed analysis in Washington (WFPB 1998). Field studies were undertaken to visit representative examples of fish-bearing streams, observe channel geomorphology and fish habitat, and ground-truth the aerial photograph assessment."

394-155 | Color aerial photographs were 1:24,000 scale. It is questionable whether this scale is adequate for Washington Watershed Analysis methodology. The DEIS and technical appendix should describe what Washington watershed methodologies were used (that is, which modules were used).

"For the impact assessment, it was assumed that the action alternatives would require clearing vegetation over a 150 ft wide corridor along the entire project area. This assumption is conservative because BPA would seek to minimize vegetation clearing in riparian areas by not placing towers in riparian areas."

394-156 | The statement conflicts with other statements in the DEIS and its technical appendices. The ROW would be 150 ft with or without towers; the DEIS indicates that clearing could occur in an area as wide as 400 ft. The DEIS and technical appendices need to speak consistently on the nature of project features (number location, width, etc.) of the proposed action.

"...it was assumed that the action alternative would require clearing vegetation over a 150 ft wide corridor...."

394-157 | This assumption is incorrect based on conflicting information provided in sections 1.1.1.2 and 1.1.1.5. The DEIS and technical appendices need to speak consistently on the nature of features of the proposed action.

3.2.1 Cedar River Watershed Habitat Conservation Plan

394-158 | Any reference to "ecological reserve" in this or any other section of the DEIS or its technical appendices is incorrect. The "ecological reserve" as a "conservation strategy" is not included in the final signed version of

and explosion, and to protect people and property in the event of a fire or explosion.

394-140 | See response to Comment 394-132.

394-141 | BPA is proposing using a special footing design, micropiles, so that impacts would be reduced. No grading would be necessary except for the spur roads to each tower site and limited grading at tower sites on very steep slopes for micropile drilling equipment. The location of stringing sites are determined by BPA's construction contractors and are unknown at this time. It is likely that there would be one stringing site where there is an angle structure in the CRW. Other sites would likely be outside the CRW.

394-142 | See response to Comment 382-011.

394-143 | Blasting will not take place next to fish bearing streams.

394-144 | Noise, particularly noise derived from activities not performed underwater, has not been shown to have any impact on salmonid fishes. The potential impacts of fine sediment (such as dust) on fish habitat are described in Section 4.6.2.3 of the SDEIS.

394-145 | Locations would be restored to their original preconstruction condition to the extent practicable.

394-146 | Restored to previous condition without changing the character of the road, if necessary.

394-147 | Disturbed areas are to be reseeded with native seed mix as soon as construction is completed in that area. However, in many cases, locally adapted native plant materials are not available. Many native species available for restoration are actually from other areas, representing different genetics than existing vegetation. BPA would consult with the DNR, SPU, other agencies and Tribes about the appropriate seed mixtures to use.

394-148 | BPA system planners are constantly studying the transmission system. BPA is proposing the Proposed Action since the capacity of the present system is near the limits of its capability. If the limit would be exceeded during time of peak demand (during the

- 394-159 | the HCP (2000). This section and any other references to the HCP should be revised, updated, and clarified throughout the DEIS and its technical appendices to reflect content of the final version of the HCP (2000).
- 3.2.1 CRW HCP**
- "...principal water supply for the City of Seattle..."
- 394-160 | The Cedar River Watershed is not the principal water supply just for the citizens of Seattle, but numerous other communities as well (27 additional purveyors and communities), totaling 1.3 million people. The DEIS and technical appendix should accurately describe the role of the Cedar River Watershed.
- 3.4.1 Alternative 1**
- 394-161 | The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts. Several errors in this section suggest the environmental analysis for the CRW portion of the proposed action was not thorough. These errors include:
- Segment C –**
 "...the floodplain (of the Cedar River) is not confined... (where it crosses the proposed ROW)"
- 394-162 | The river is actually moderately confined within a glacial fluvial terrace.
- "Currently, this reach of the Cedar River supports rainbow and cutthroat trout."
- 394-163 | The Cedar River also contains non-salmonid species.
- "Currently, this reach of the Cedar River supports rainbow and cutthroat trout."
- 394-164 | Although this statement is true, it is misleading insofar as these two species occur in a ratio of approximately 99 to 1 (rainbow to cutthroat). The DEIS and technical appendix should state this clearly so as to not be misleading. The same clarification should be made in all other sections where similar statements occur.
- "Once passage around the Landsburg Diversion Dam has been established (in September 2002), it is likely that this reach would support all anadromous species now prevented from upstream migration by the Landsburg Diversion Dam, including chinook, coho salmon, and steelhead."
- 394-165 | Sockeye will be prevented from passage beyond Landsburg even with the new passage facility. The DEIS and technical appendix should correct this statement in all sections in which it occurs in error.
- Segment D –**
 "The affected streams have a pool-riffle morphology..."
- 394-166 | As described in the paragraph above, many streams in this segment flow down relatively steep slopes (20 to 40 percent). Stream gradients on these slopes are generally too high to support pool-riffle morphology and are more commonly step-pool or cascade channel types.
- "Rock Creek, downstream of this segment, is known to be used by cutthroat trout and, where it joins with the Walsh Lake diversion ditch, by coho salmon and Walsh Lake kokanee."
- 394-167 | Rock Creek does not join with the Walsh Lake diversion ditch. It flows directly to the Cedar River and is not connected to the ditch. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

- coldest days of the winter season) and a major BPA line were to go out in the area, this scenario could develop. See BPA's expanded discussion on need for the project in Chapter 1 of the SDEIS.
- 394-149 | An analysis of impacts to coho salmon habitat is presented in Section 4.0 of the Fisheries Technical Report (revised Appendix A) and is further detailed in the biological assessment for the proposed transmission line.
- 394-150 | See response to Comment 394-082.
- 394-151 | Please see response to Comment 340-002.
- 394-152 | Please see response to Comment 394-150.
- 394-153 | The inventory of fish-bearing streams used in the analysis was based on the inventory of such streams presented in the Draft Cedar River Watershed HCP (City of Seattle 1998). The Draft HCP was used because the Final HCP (City of Seattle 2000) was not available for public review at the time the Fisheries Technical Report (Appendix A) was being prepared. Figure 3 and revised Appendix A of the Fisheries Technical Report includes the inventory of fish-bearing streams presented in the Final Cedar River Watershed HCP.
- 394-154 | Data do not indicate that detailed analysis of Type 4 and 5 streams would substantively alter the findings of the analysis. The effects of the Proposed Action on such streams would be approximately the same as the effects on Type 3 fish-bearing streams, and those effects are detailed in Section 4.0 of the Fisheries Technical Report (revised Appendix A).
- 394-155 | The module used was Appendix D, Riparian Function (WFPB 1998), which is the only module that describes methods for assessing riparian vegetation. A skilled aerial photograph interpreter has little difficulty interpreting stand structure using the quality of aerial photographs available for this analysis. Moreover, results were field-verified and, for that portion of the project within the Cedar River Watershed, were corroborated by vegetation structure maps provided in the Draft Cedar River Watershed HCP (City of Seattle 1998).

**3.4.2 Alternative 2
Segment G**

"Currently, this reach of the Cedar River supports rainbow and cutthroat trout."

394-168 | Non-salmonid species are also present there. See comment re: ratio in comment above. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

"Once passage around the Landsburg Diversion Dam has been established in September 2002, it is likely that this reach would support all anadromous species now prevented from upstream migration by the dam, including chinook, coho and sockeye salmon, and steelhead."

394-169 | Not all anadromous species will be allowed passage. See comments above. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

3.4.3 Alternative 3

394-170 | Another error/omission: Taylor Creek also has resident cutthroat trout. See the more detailed comment in SPU's review of the DEIS. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

Segment J

"Within the project area, Taylor Creek is known to contain resident rainbow trout, but a natural falls near its mouth renders the stream inaccessible to anadromous fish."

394-171 | Non-salmonid species are also present. SPU data indicate that Taylor Creek has predominately cutthroat trout and perhaps relatively small numbers of rainbow trout. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

"Currently, this reach of the Cedar River supports rainbow and cutthroat trout."

394-172 | Non-salmonid species are also present. See previous comment on ratio. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

3.5 Access Roads

"All new access roads would that have the potential to affect fish-bearing streams would be situated within the alternative ROW's...."

394-173 | This statement appears to be inconsistent with information provided in Section 1.1.1.3. Also, it appears the effects of temporary roads and construction of the 50 ft temporary construction easement previously mentioned by BPA (but not mentioned in the DEIS) are not considered at all in this environmental analysis.

4.0 Environmental Consequences

"All of these are recognized as common impacts to fish populations and habitat as a result of timber harvest and associated activities in mountainous terrain in the Pacific Northwest (WFPB 1998, City of Seattle 1998). It is largely incidental that timber harvest would be followed by installation of a transmission line for the proposed project."

394-174 | This statement appears to suggest: "the proposed action is no different than a timber harvest, it just happens that BPA will be putting in a transmission line after the trees are cut." This statement obscures the point that

394-156 | Not all trees in the ROW would be removed. Transmission towers are typically sited on higher ground, and they generally span drainages and associated riparian areas. Siting towers in this manner would increase the likelihood that the conductors may be above riparian areas and may require less removal of vegetation. BPA would also leave/protect low-growing vegetation where possible.

394-157 | The proposed right-of-way would be 150-feet wide. The right-of-way would cross riparian areas and ravines where some of this vegetation would not need to be taken. BPA tries to remove tall-growing woody vegetation from its rights-of-way and establish low-growing vegetation to maximize cost-effectiveness and minimize the environmental damage by having to continually revisit the rights-of-way to remove tall-growing species.

394-158 and -159 | Comment noted. The technical appendices and the SDEIS have been revised to reflect this comment. BPA appreciates the clarification provided.

394-160 | Comment noted. Changes were made in the technical study reports and the SDEIS to reflect this comment.

394-161 | Comment noted.

394-162 | Comment noted.

394-163 | Section 3.4.1 of the Fisheries Technical Report (Appendix A) has been revised to clarify this point.

394-164 | Section 3.4.1 of the Fisheries Technical Report (Appendix A) has been revised to clarify this point.

394-165 | Section 3.4.1 of the Fisheries Technical Report (Appendix A) has been revised to clarify this point.

394-166 | The *affected* streams have a much lower gradient. Streams with 20-40 percent gradient are generally regarded as non-fish-bearing and moreover are much less vulnerable to the types of impact discussed in the Fisheries Technical Report (Appendix A) than are pool-riffle streams, especially fish-bearing ones.

- timber harvest would not happen if the transmission line was not constructed. It also fails to acknowledge the notion that impacts of the proposed vegetation clearing in the ROW would be long-term and on-going—much longer and more disruptive than a timber harvest. The DEIS and the technical appendix need to present an accurate description of the proposed action. More importantly, the CRW HCP provides long-term protection status to forests in the CRW. Thus, these forests will continue to age and provide increasingly unique, low elevation conifer forest habitats in the rapidly developing Puget Sound region. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.
- "...or toxicity or deterioration of water quality from accidental spills of hazardous materials."
- 394-175 | The DEIS and technical appendix should evaluate the potential of leaching of metals from the towers or lines, and the associated risks to water quality.
- 4.1 Construction Impacts**
4.1.1 Impacts Common to All Action Alternatives
4.1.1.1 Impacts
- Disturbance to Fish Habitat from Removal of Riparian Vegetation**
- "Riparian trees protect fish habitat by filtering runoff before it reaches the stream, shading the stream and reducing mid-summer temperatures, providing LWD to streams which increases habitat complexity, and providing organic matter to the stream which increases productivity in the aquatic food chain".
- 394-176 | Riparian trees and vegetation also provide soil stability, shoreline stabilization, and insects as food.
- "BPA would prepare a clearing plan ..."
- All methods proposed in this plan would have to meet and be conducted by SPU standards and with SPU approval for all areas within CRW.
- 394-177 | "... drainage features would be installed where needed in accordance with the Washington Forest Practices Rules (WSFPR).
- SPU standards would have to be followed if they exceed WSFPR and would be subject to SPU approval for areas in CRW.
- Culvert or Bridge Installation—**
- "Some fish in the streams along the proposed transmission line ROW, including sensitive species such as bull trout, steelhead, and salmon, migrate upstream to spawn."
- 394-178 | Although it is mentioned elsewhere in the report that bull trout are not likely to be found in the project area due to warm stream temperatures, it is implied that they are here. The CRW HCP presents strong evidence that bull trout are not resident in the lower Cedar River system, but this source is not cited in this technical appendix. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.
- "BPA would comply with guidelines for fish passage in the design"
- 394-179 | The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

- 394-167 | The relationship between the two streams has been clarified in Section 3.4.1 of the revised Fisheries Technical Report (Appendix A).
- 394-168 | Comment noted.
- 394-169 | Section 3.4.2 of the Fisheries Technical Report (Appendix A) has been revised to clarify this point.
- 394-170 | Section 3.4.3 of the Fisheries Technical Report (Appendix A) has been revised to clarify this point.
- 394-171 | Section 3.4.3 of the Fisheries Technical Report (Appendix A) has been revised to clarify this point.
- 394-172 | Comment noted.
- 394-173 | There is no inconsistency. New access roads outside the ROW would be distant from fish-bearing streams and have no potential to cause impacts to them. Temporary roads may be needed by the construction contractor for clearing trees and for access to pulling and reeling sites. Temporary roads would be located within the existing or new ROW in upland areas. One temporary bridge crossing, running from upland bank to upland bank, may be needed for construction. The bridge would be removed after construction. Temporary roads would be abandoned and the disturbed area would be reseeded.
- 394-174 | Comment noted.
- 394-175 | No toxic materials have been identified leaching from Bonneville Power Administration (BPA) lines or towers. BPA has reviewed the processes by which the steel to be used for towers in the CRW would be prepared to determine if hazardous materials could leach from the steel. The protective coating on these towers will be hot-dipped galvanization. This is a Zinc coating that fuses with the steel as well as coats it. This is the same process used to galvanize steel pipes for potable water transmission.
- The galvanized steel is then dulled by dipping into acid. This gives the steel a darker appearance. The acid is rinsed off completely by dipping into a water bath.

Fine Sediment Delivery to Streams—

"Clearing of the transmission line ROW, grading and placement of tower footings, and construction of new access roads and their associated stream crossing structures would expose soil to the erosive forces of wind, rain, and surface runoff during construction and until sites were revegetated. Such erosion would deliver fine sediment into streams....Construction of the transmission line would cause low impacts to fish and their habitat as a result of erosion and sedimentation... BMPs that would minimize potential impacts to fish from turbidity and sedimentation."

394-180

This analysis of potential erosion effects does not mention that the types of soils the ROW passes through on the south slope of Brew Hill are poorly consolidated glacial sediments that easily erode. SPU has observed active erosion in the existing ROW where Rock Creek is incised into a narrow ravine. Although a note in this report mentions the existing ROW offers a good basis for predicting effects of the proposed ROW, impacts of the existing ROW to streams (such as erosion) are rarely mentioned in the analysis. Rather than acknowledging that such erosion could be an ongoing problem, the analysis states that revegetation and BMPs will readily eliminate erosional effects. This is questionable considering BPA's present level of management of its existing ROW. The DEIS and the technical appendix need to present a complete and accurate analysis of fisheries and potential impacts.

"BPA has constructed transmission lines using a number of standard construction practices and BMPs that would minimize"

394-181

The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

Adverse Effects to Fish from Accidental Spills of Hazardous Materials –

"Spill Prevention and Contingency Plan..."

The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

Impacts to Species Listed and Proposed for Listing under the Endangered Species Act—

394-182

Impacts of reduced LWD input and increased stream temperatures are described as possible impacts to listed or proposed listed species. Sedimentation, as described just above, is also a potential impact.

"Other streams in the project area are too narrow and steep to support chinook salmon spawning habitat, and all streams in the project area are too warm to support bull trout spawning habitat."

394-183

This is likely untrue for Steele Creek and lower Taylor Creek. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.

"... all streams in the project area are too warm to support bull trout."

394-184

The DEIS and technical appendix should provide data or appropriate references to support this contention. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.

4.1.1.2 Mitigation

The last step in the coating process is to apply a white rust inhibitor (keeps white rust from forming while in transit). This is accomplished by dipping the steel into a solution of Sodium Dichromate, that when applied, fuses to the metal becoming Zinc Dichromate. This last step is optional and will be foregone for material entering the CRW.

The fasteners (bolts) are galvanized in the same process as indicated above. A lubricating wax is utilized as dictated by the ASTM A325 and ASTM A563 standards.

The aluminum conductors (lines) are essentially pure aluminum (99.4% Al) with galvanized steel cores. The aluminum (line) is essentially inert as it is coated with a layer of aluminum oxide NOTE: Aluminum oxide is one of the most stable ceramics known. There are no oxidation inhibitors applied to ACSR conductors. The galvanizing on the steel core is sacrificial, as is the standard scheme with any galvanizing.

Insulators are essentially an inert entity being of porcelain/galvanized steel or EPDM polymer/galvanized steel. Either insulator type carries no corrosion inhibitor nor do they leach any compounds in significant quantities (if at all).

394-176 Section 4.1.1.1 of the Fisheries Technical Report (Appendix A) has been revised to note this point.

394-177 When the DEIS was written, not all information was available. The term "clearing plan" is not a plan per se — it is a clearing advisory based on topography and location of the conductor (sag and swing) that gives "safe" heights, i.e., heights that could be allowed given a few years growth at various distances from centerline. This advisory, in conjunction with other tools, aids in the selection of danger trees and retention of vegetation within the ROW. BPA will be preparing a clearing plan specific to the CRW with assistance from SPU staff.

See response to Comment 394-081.

394-178 The Proposed Action does not only affect the Cedar River Watershed. Bull trout may be present in the Raging River Watershed. The Fisheries Technical Report (Appendix A) does not say that bull trout are likely to spawn in the project area.

- 394-185 The term "mitigation" as used here appears to refer to methods for minimizing impacts, not actions to replace lost function. One of the most serious deficiencies in the DEIS and all of its technical appendices is the lack of compensatory mitigation for the unavoidable impacts that would occur. Impacts to fish populations and habitat (including listed species) are acknowledged in the DEIS and its technical appendices, yet no compensatory mitigation is recommended to compensate for these impacts. The DEIS and technical appendices should commit to compensatory mitigation for unavoidable impacts.
- 394-186 BPA is obligated to acknowledge and meet the intent of local regulations, including sensitive areas provisions. For example, King County requires other public utilities such as Puget Sound Energy to compensatorally mitigate every tree removed from wetland and riparian habitats during operation and maintenance of their transmission system. The DEIS and technical appendix should commit to similar or other adequate and appropriate compensatory mitigation to meet the intent of local sensitive areas provisions.
- The DEIS and technical appendix should acknowledge that all pertinent plans, BMPs, and methods mentioned in this section would meet SPU standards and be subject to SPU approval for all areas within CRW.
- "To minimize potential impacts to fisheries habitat from clearing of vegetation: BPA would site the transmission line to minimize clearing of riparian vegetation..."*
- 394-187 Locating the proposed transmission line ROW alternatives appear to be relatively fixed. Information presented in the BA on the location of project facilities for the proposed action also suggests these features are relatively fixed. Therefore, siting the line to minimize clearing of riparian vegetation is unlikely. The DEIS, its technical appendices, and associated permitting documents need to present a complete and consistent description of the proposed action.
- "Culverted crossings in areas where fish are present would be designed to achieve appropriate flow and depth for fish passage and would be large enough to prevent clogging with debris."*
- 394-188 How large would these be? It seems unlikely that absolute prevention of debris clogging would be achieved. What about maintenance of culverts? The DEIS and technical appendix should describe the process for determining the size and location of culverts, and should disclose who will be responsible for maintaining roads and culverts. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.
- To minimize the potential for increases in fine sediment delivery to streams: "...In areas that could be susceptible to erosion, BPA would stabilize the site or road using a variety of methods, which may include riprapping or mulching."*
- 394-189 Mulching is not likely to stabilize the site or road, although it could provide some temporary reduction in sedimentation. Riprapping along waterbodies is generally not a desirable form of bank stabilization, except where absolutely necessary to protect built structures. In such cases, King County has required compensatory mitigation for the use of riprap. The DEIS and technical appendix should describe the compensatory mitigation to be implemented should riprap be used.
- "BPA would site towers and roads appropriately, use sediment and erosion control methods during construction, and minimize clearing of riparian vegetation."*
- 394-190 The DEIS and technical appendix should describe these project components. Information provided in the BA suggests that BPA has conducted sufficient design engineering for the proposed action as to be able to describe these components in detail. The DEIS' s "trust us" approach is not satisfactory for this proposed action.

- They are not, due to (relatively) warm waters throughout the Raging River Watershed. However, the U.S. Fish and Wildlife Service does not regard the absence of high-quality bull trout habitat as proof of their absence from the Watershed; for example, it is conceivable that an anadromous individual could ascend the Raging River to the project area, in spite of the absence of suitable spawning habitat in the Raging River headwaters. These and related considerations are discussed in greater detail in the Biological Assessment for the proposed project. The USFWS did conclude that the project would not affect bull trout (U.S. Fish and Wildlife Service, February 23, 2002).
- 394-179 See response to Comment 394-081.
- 394-180 Areas of soil erosion would be expected along steep banks of a high-energy stream that is incising, such as was described for a section of Rock Creek. All but one of the soil units mapped along the southern and eastern flanks of Brew Hill, which Alternative 1 would cross, are indicated by the US Soil Conservation Service (presently referred to as the Natural Resource Conservation Service) to have a slight erosion hazard. An area of moderate soil erosion hazard is mapped in the headwaters of Rock Creek (soil unit 274, Welcome Loam, Figure 5, Sheet 2 of 3, Geology, Soil, Climate, and Hydrology Technical Report). For more information, see Appendix F of the FEIS.
- 394-181 Please see response to Comment 394-179.
- 394-182 Sedimentation is recognized as an effect in many parts of the Fisheries Technical Report (revised Appendix A) and is discussed at length in Section 4.1.1, Impacts Common to all Alternatives.
- 394-183 Thank you for your comment. However, in the absence of supporting data, this information is not sufficiently credible to be incorporated into the technical analysis.
- 394-184 No bull trout spawning areas have been identified in western Washington at elevations of less than 2,000 feet. Section 4.1.1.1 of the revised Fisheries Technical Report (Appendix A) provides an appropriate citation.

"BPA uses several standard methods to minimize erosion and sedimentation associated with transmission line construction."

394-191 | The DEIS and technical appendix should describe these "standard methods."

"Except at stream crossings, roads would be constructed outside of the riparian corridors of streams,"

394-192 | Does this mean the HCP 300 ft buffer? The DEIS and technical appendix should define what is intended by "riparian corridors."

"BPA would comply with the standards and guidelines established in the Record of Decision (ROD) for vegetation management (BPA 2000)."

394-193 | The DEIS and technical appendix should include a summary. It is not reasonable for readers to obtain and read the ROD.

"To avoid potential impacts to fish from acoustic shock"

394-194 | Specifically, "working within WDFW windows" is missing.

4.1.1.3 Cumulative Impacts

394-195 | There is no mention of cumulative impacts relative to the existing transmission line ROW. Clearing of the existing ROW has resulted in loss of LWD recruitment, reduced shading to streams, and probably increased erosion. Yet the analysis in this report does not address the cumulative effects that the proposed transmission ROW would have to these already existing impacts. This comment applies to all the Cumulative Impacts assessments in the DEIS and its technical documents.

4.1.1.4 Unavoidable Effects, Irreversible, or Irrecoverable Commitment of Resources
"Even with BMPs to control erosion, road construction would likely cause some fine sediment to enter nearby streams. This effect could be minimized by consistent monitoring, especially during storm events, and by proper maintenance of road and stream crossings."

394-196 | No monitoring program is described anywhere in the DEIS or this technical appendix that would address sediment input to streams. Unless BPA is committed to implementing such a monitoring program, this reference should be eliminated and BPA's intent to do no such monitoring should be disclosed. However, the DEIS and technical appendix should describe commitments to avoiding, minimizing, and correcting erosion problems.

"This effect could be minimized by consistent monitoring, especially during storm events, and by proper maintenance of road and stream crossings."

394-197 | Is BPA committing to such monitoring and maintenance?

"..... because water temperatures are generally too high to support bull trout ..."

394-198 | The DEIS and technical appendix need to provide data or appropriate reference to support these conclusions.

4.1.3 Alternative Transmission Line Impacts
4.1.3.1 Alternative 1 Impacts—

394-185 Please see response to Comment 340-002.

394-186 Please see responses to Comments 340-002 and 394-081.

394-187 See response to Comment 394-103.

394-188 See response to Comment 394-084. Sizing and design of drainage culverts is also described in Section 4.6.2.2 of the SDEIS. Section 4.4.2.1 also contains design guidelines for culverts.

394-189 The only riprap that would be used would be 6-inch light riprap as ditch lining associated with access road construction. The road where it would be used is located outside of any delineated wetlands and is not along a stream.

394-190 The SDEIS includes more design information. BPA knows of no mortality issues involving avian species with its existing Raver-Echo Lake power line in the project. All proposed facilities (towers, access roads and substation expansion) have been sited in uplands, and BPA would prepare an erosion and sediment control plan as required by the National Pollutant Discharge Elimination System, to control stormwater runoff until the site has become 70 percent stabilized, as required by the permit. BPA would file the stormwater permit with EPA, and also file a notice of termination at the time the temporary stormwater erosion control devices would be removed. BPA would also try to minimize the removal of any riparian vegetation.

394-191 Section 4.4.2.1 of the SDEIS describes a variety of mitigation measures that will be imposed to control erosion during and after construction.

394-192 Section 9.0 of the Fisheries Technical Report (Appendix A) includes a glossary that defines technical terms such as "riparian."

394-193 The Vegetation Management ROD is available upon request and can also be found on the internet at www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/VegetationManagement_EISO285. It is not difficult to obtain.

"Construction of Alternative 1 would result in the clearing of 33 ac. within 300 ft. of potentially fish-bearing streams, and 12 ac. within 100 ft. of potentially fish-bearing streams. About 2,900 ft. of stream would be within the cleared ROW."

394-199 | This generalized accounting of clearing includes no site-specific information. There is no information presented about how much clearing is associated with what stream crossing. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.

**Cumulative Impacts—
Stream Temperature:**

"Proposed vegetation clearing would not comply with riparian shade protections called for by either the Washington Forest Practices Rules or the CRW HCP, and may result in local peak stream temperatures exceeding metabolic optima for salmonids. In streams only utilized by resident salmonids, this would constitute a moderate impact. In the three streams potentially utilized by threatened salmonid species (Cedar River, Raging River, and Rock Creek), this could constitute a high impact... The third stream, Rock Creek, would be crossed in a headwaters area and would be very unlikely to be utilized by chinook salmon (which avoid such narrow, high-gradient streams) or bull trout (which do not spawn in such warm streams). These considerations may result in a low impact to threatened species, but this conclusion cannot be confirmed until the extent of clearing needed in the affected areas is known."

394-200 | This section needs to disclose that Rock Creek will likely have coho salmon, a species proposed for listing. It should receive protection equivalent to listed species, and therefore rates as a **high** impact. Also, this environmental analysis is not clear with regard to the extent of clearing. The results of this analysis can not be evaluated. The DEIS and technical appendix need to assume a specific level, presumably a maximum level, of clearing for a review of the analysis to be possible. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.

LWD Recruitment:

"Currently, LWD recruitment is protected by provisions of the Washington Forest Practices Act and the Cedar River and WDNR HCPs that ensure retention of riparian forest buffers 100 to 300 ft. wide. Proposed vegetation clearing would not comply with those protections and may result in reduced LWD recruitment and resulting adverse impacts to in-stream fish habitat."

394-201 | No attempt is made to quantify how much stream would be affected by clearing of these buffer areas. SPU has estimated that approximately 1,800 ft of Rock Creek is within 300 ft of the cleared right of way. Streams that run parallel to the ROW will have more impact. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.

"Because no herbicides would be used in vegetation control within 400 ft. of streams and none would be used in the CRW, cumulative effects of toxic substances from the power line would be unlikely even when combined with other sources in the watersheds."

394-202 | Again, are there any toxics (metals) leaching off the lines or towers? The DEIS and technical appendix should evaluate the potential for such leaching, and the associated risks to water quality.

**4.1.3.2 Alternative 2
Impacts—**

The Alternative 2 ROW would be 9 mi. long and cross 11 fish-bearing (Type 1, 2, or 3) streams and an unknown number of non-fish-bearing (Type 4 or 5) streams.

394-194 | As noted in Section 4.1.1.2 of the Fisheries Technical Report (Appendix A), impacts due to acoustic shock would be avoided by doing any required blasting when vulnerable life history stages are not present.

394-195 | The existing transmission line was considered in the cumulative effects evaluation. The cumulative effects evaluation in Section 4.0 of the Fisheries Technical Report (Appendix A) was revised to make this clear.

394-196 | BPA intends to conduct a water turbidity monitoring program of the Cedar River, prior to, during, and following the completion of construction activities. Although the details of the monitoring program have not been worked out, the landowner's input (SPU) would be sought in how such a monitoring program would be conducted.

394-197 | BPA is committed to conducting water turbidity monitoring to assure that its activities would not affect the water quality of the Cedar River Municipal Watershed; although the terms of such a monitoring program has not yet been determined.

With respect to maintenance activities, BPA tries to maintain all of its facilities on an as needed basis and has developed a long-term maintenance agreement with SPU for access road maintenance in the CRMW.

394-198 | Section 4.1.1.4 of the revised Fisheries Technical Report (Appendix A) provides an appropriate citation.

394-199 | Areas potentially affected by clearing at stream crossings are all identified in Figure 3 of the Fisheries Technical Report (Appendix A). Areas potentially affected by clearing of riparian forest are listed in Table 4 of the report. BPA was unable to obtain access to the CRW to gather site-specific clearing information, so that data was unavailable.

394-200 | The revised Fisheries Technical Report (Appendix A) acknowledges that potential coho salmon use of Rock Creek. However, coho salmon is not a listed species under the ESA and NMFS has found that listing is "not warranted." Therefore, it is

- 394-203 | Descriptions of segments E, F, and G (the difference from Alternative 1) only identify the Cedar River – yet 2 additional stream crossings are numbered here compared to Alternative 1. The DEIS and technical appendix need to present a complete and consistent analysis of fisheries and potential impacts.
- “New roads would cross two fish-bearing streams, requiring that culverts or bridges be built.”
- 394-204 | Where would these features be located? Previous sections have not identified them. Reviewers are unable to assess environmental impacts without knowing where these new crossings would be.
- 4.1.3.3 Alternative 3
Cumulative Impacts—
Stream Temperature:**
“The one stream potentially utilized by threatened salmonid species, the Cedar River, runs in a relatively deep canyon where little vegetation clearing may be required—in this case, a low impact would be expected for threatened species. If extensive clearing were required, however, this would result in a high impact.”
- 394-205 | As mentioned above, the DEIS and technical appendix need to be specific about anticipated environmental impacts. Reviewers need to know if this extensive clearing will or will not occur to be able to assess the impacts of the proposed action.
- Table 5*
- 394-206 | This table contains incorrect information. For example, based on data provided in Burton (1999), the earliest confirmed sighting of Chinook salmon in the Cedar River is August 18. Based on data in Burton (1997), the latest recorded steelhead spawning is June 11, and the latest date of completion of steelhead spawning is August 11. The DEIS and its environmental analyses should be based on correct information on the affected natural resources. This table should be revised to include correct information. (Burton, Karl. 1997. Cedar River steelhead monitoring program annual report. Seattle Public Utilities.) (Burton, Karl. 1999. Temporal and spatial distributions of Cedar River Chinook salmon spawning activity. Seattle Public Utilities.)
- Also, this or another table should address lamprey species in the same manner.
- 4.1.3.6 Access Roads
Cumulative Impacts—**Because all roads in the project area are currently managed to avoid delivery of fine sediment to fish-bearing streams, cumulative impacts due to roads would be low under each of the action alternatives.
- 394-207 | This statement is unclear. Not all roads in the project area are currently designed or managed to avoid delivery of fine sediment to streams. Also, it is SPU’s opinion that BPA currently does not manage the roads it uses in the CRW such that delivery of fine sediment to fish-bearing streams is avoided. Roads in the CRW are the most significant sources of sediment to streams. Adding more than 1.5 mi of new roadway and impervious surface is a clear and significant cumulative impact. The DEIS and technical appendix need to state clearly what is meant by this statement and acknowledge the significant role of roads in contributing sediment to streams. SPU believes the cumulative impacts of adding such new roads are greater than “low.”
- 4.2 Operation and Maintenance Impacts
4.2.1 Impacts Common to All Action Alternatives
4.2.1.1 Impacts**
“... routine monitoring of the transmission line.”
- 394-208 | In addition, BPA should be “on call” for response if notified of a problem or need for maintenance at any time by SPU.
- Appendix A SPU Comments.doc | Page 13 of 14 | ; 09/05/01
- not evaluated as “equivalent to listed species.” Further details on potential effects to chinook and coho salmon, and bull trout, are available in the biological assessment for the Proposed Action. Because detailed designs have not been prepared, information on the planned extent of riparian clearing is not available.
- 394-201 | See response to Comment 394-199. BPA assumed that the maximum potential amount of clearing would be necessary, and impacts were evaluated on the basis of this assumption.
- 394-202 | See response to Comment 394-175.
- 394-203 | Potential impacts to streams resulting from the Proposed Action are detailed in Section 4.0 of the Fisheries Technical Report (Appendix A).
- 394-204 | As is shown in Figure 3 of the Fisheries Technical Report (Appendix A), the two new roads are located at crossings “9” and “10” in Segment “E.” Segment E is a part of Alternative 2, not the Proposed Action. BPA has designed its access road system to avoid constructing any new roads across fish-bearing streams.
- 394-205 | All streams would be spanned. BPA is proposing a double-circuit option at the Cedar River crossing to reduce clearing.
- 394-206 | Section 4.1.3.3 of the Fisheries Technical Report (Appendix A) has been revised to include this information. Details about potential impacts to lamprey species is presented in the Biological Assessment for the Proposed Action.
- 394-207 | BPA would design and maintain all roads to avoid or minimize fine sediment delivery to streams. It is true that some roads may occur in the project area that are neither used nor maintained by BPA. Such roads represent existing conditions and their future use or maintenance was not evaluated as part of the Proposed Action. As noted in the Fisheries Technical Report (Appendix A), the new roads would be constructed in accordance with a number of mitigation measures and would have a “low” impact. It is agreed that in the absence of such mitigation measures, the impact of the new roads might not be “low.”

"During routine maintenance, BPA would also inspect roads, identify potential erosion problems, and correct any erosion problems identified."

394-209 | An earlier section suggested that inspections would need to be done after storms.

5.3.1 CRW HCP

394-210 | The DEIS and technical appendix should clearly acknowledge that the proposed action does not comply with riparian and stream protection provisions specified in the City's HCP.

394-208 BPA personnel are readily available to address any problem or need for maintenance.

394-209 The Fisheries Technical Report (revised Appendix A) does not contain any references to road inspection after storms.

394-210 Section 4.1.1.1 of the Fisheries Technical Report (revised Appendix A) states that vegetation clearing that is not performed in accordance with established regulatory standards is assumed to have a moderate or high impact on fish resources. As noted in the text, three different regulatory standards may apply. One of these is the Cedar River Watershed HCP (City of Seattle 2000). On other lands within the project area, the WDNR HCP (1997) or Washington Forest Practices Rules (WFPB 2000) may apply.

**Kangley-Echo Lake Transmission Line Project DEIS
Appendix B – Final Wildlife Technical Report**

**Comments from Seattle Public Utilities
September 4, 2001**

DEIS Appendix citations in italics; SPU comments in normal font.

394-211 | The term “conversion” rather than “alteration” is traditionally preferred when referring to converting one habitat type to another, either permanently or temporarily.

1.1.1.2 Clearing

“A clearing advisory would be generated...”

394-212 | An example of how the clearing advisory would work is essential to understanding how variable the area of clearing outside the ROW will be.

“Merchantable timber purchased from private owners would be marketed and non-merchantable timber would be left lopped and scattered, piled, chipped, or would be taken off-site. Non-merchantable timber may or may not be burned because of air quality constraints... Additional best management practices (BMPs) for timberland would also be used... The total amount of clearing required for this project is unknown at this time... An additional amount of land would be cleared for roads that are needed off the ROW and for roads determined to be in poor condition and requiring upgrading by BPA.”

394-213 | SPU is not able to comment on this effectively because insufficient information is presented. How will the merchantable timber be valued, especially in light of the goals of the Cedar River Watershed (CRW) Habitat Conservation Plan (HCP)? That is, the value of the trees to SPU is not so much in their value as timber but in the habitat and water quality functions they provide. The DEIS and technical appendix should indicate how SPU will be compensated for the habitat and water quality values of the harvested trees and the associated opportunity costs that SPU will incur for this lost habitat over the lifespan of BPA’s constructed proposed action. The DEIS and its technical appendices need to present a complete and consistent description of the proposed action.

394-214 | Also, the DEIS and technical appendix need to commit to regarding the disposition of non-merchantable: is it going to be left or taken, burned or not? The DEIS and technical appendix should describe the BMPs that will be implemented.

394-215 | The DEIS and technical appendix should present firm estimates of the amount of land to be cleared and where clearing will occur. As evidenced by information presented in the project’s BA, BPA has sufficiently engineered the proposed action such that locations for towers and new roads have been identified. BPA should thus be able (in the DEIS and its technical appendices) to firmly estimate the total amount of clearing for the proposed action. The DEIS and the technical appendix need to present a complete and accurate environmental analysis, which includes the disclosure of such known project characteristics.

394-216 | Also, the DEIS and technical appendix should state that merchantable timber would be purchased from landowners, subject to landowner approval, and should not be stated as an absolute. Some landowners may wish to retain the logs.

“... all trees, bush and snags would be felled and stumps over 22” would be removed, including their root systems.”

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394-211 | Comment noted.

394-212 | BPA would gladly share the data within the clearing advisory and show SPU personnel how that data is used to aid in the selection of danger trees and retention of vegetation within the ROW.

394-213 | There are but a few ways to value merchantable timber. The method most accepted within the appraisal industry is to value that timber through the Cost Approach — delivered prices less costs. There is mitigation proposed to replace any potential lost value of the CRW.

394-214 | Burning will not be allowed. See response to Comment 394-129. Disposal of nonmerchantable timber is usually part of negotiations with landowners. On some property nonmerchantable timber is treated as slash and will be disposed of through a number of possible ways including lop and scatter, chipping, mulching, piling, etc. Some landowners prefer that the timber be left for their use. In wetlands, the trees cut would be left in the wetland, or removed by helicopter.

394-215 | Some of the information needed to pinpoint the quantity of clearing needed along the streams throughout the Proposed Action area is not available at this time. More field work needs to be done to fully determine the amount of clearing that would be required.

394-216 | Comment noted. These details would be worked out with each individual landowner at the time the land rights would be acquired.

394-217 | BPA is proposing to use a new type of tower footing (micropiles) to reduce the amount of disturbance at and near each tower site. Please see Section 2.1.1.1.

394-218 | The road surface (crown) of the roads designed to accommodate cranes and track hoes normally used to construct BPA's 500-kV towers, typically would be designed to be 16-foot wide for the linear portions of the roads and wider at turns to accommodate turning movements of the longer vehicles, such as the crane and log trucks. BPA roads typically range in width from 12 to 16 feet.

394-219 | See response to Comment 394-147.

- 394-217 | The DEIS and technical appendix should describe how far beyond the footprint of the tower will this extensive clearing extend.
- 1.1.1.3 Access Road Construction**
- "Clearing and construction activities for new access roads would disturb an area about 20' wide..."*
- 394-218 | If the road itself is 20 feet wide, the disturbed area will extend beyond this. The DEIS and technical appendix should clearly indicate if this 20' is in addition to the road itself.
- "...the roadbed would be repaired and reseeded as necessary."*
- 394-219 | The DEIS and technical appendix should specify that only native species would be used for revegetation activities in the CRW.
- 1.1.1.3 Storage, Assembly, and Refueling Areas**
- "...establish storage areas..."*
- 394-220 | The DEIS and technical appendix should address the locations for these facilities as well as related clearing/land-disturbance impacts, their adjacency to sensitive areas, and containment and fire safety design. The DEIS provides no descriptions or specifications for refueling or hazardous materials storage areas, which prevents effective review of the proposed action.
- All refueling and hazardous material usage/storage facilities would be required by SPU to be outside CRW boundary. To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. The DEIS and technical appendix should indicate how all spills would be prevented in the CRW.
- 1.1.1.5 Tower Site Preparation**
- "These disturbances could be as large as 370 ft radius..."*
- 394-221 | It is confusing to switch from an average reported total area of 30,000 square feet to a maximum radius of 370 ft, which is equivalent to 430,085 square feet. Total area should be reported in all cases so reviewers can effectively evaluate the actual impact.
- "...remove selected trees in a 50-60 foot wide area on each side of the ROW."*
- 394-222 | This is inconsistent with the statements in Appendix C that a 75 ft removal zone would be used. The DEIS and its technical appendices need to present a complete and consistent description of the proposed action.
- 1.1.1.6 Tower Construction**
- "... helicopter tower erection could be used if access was not available or if sensitive resources would be encountered."*
- 394-223 | The DEIS and the technical appendix should define "sensitive resources." Is this the same as sensitive species?
- 1.1.1.9 Site Restoration and Clean-up**

- 394-220 | See response to Comment 394-139.
- 394-221 | BPA proposes using a new footing design for the proposed project. The new footing design would use what are known as micropiles instead of the standard footing design. See Section 2.1.1.1 of the SDEIS.
- BPA would likely need to locate what is called a stringing or pull site within the CRW. These areas are selected by the contractor and would need to be agreed to by the landowner prior to their use in stringing conductors through the towers. These sites are typically about 1 acre, although they could be larger. Please see response to Comment 394-141.
- 394-222 | The Final Wildlife Technical Report has been revised, as has the other technical study reports, to remove this statement that construction crews would remove selected trees in a 50 to 60 foot-wide area on each side of the proposed right-of-way. BPA would remove so-called "danger trees" off of the right-of-way that would pose a threat to the safe construction, operation and maintenance of the line. However, these trees would need to be identified on an individual basis and could be as far as 200 feet from the proposed right-of-way. See also response to Comment 394-217.
- 394-223 | Sensitive resources include both sensitive species and habitats. This was clarified in Section 1.1.1.6 of the Wildlife Technical Report (Appendix B).
- 394-224 | See response to Comment 394-147.
- 394-225 | See response to Comment 394-147.
- 394-226 | Analysis of potential impacts from habitat fragmentation within the Cedar River Watershed was expanded in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B). Habitat loss is analyzed in Section 4.1.2, and is discussed by alternative.
- 394-227 | This discussion refers specifically to listed species. This was clarified in Section 1.3 of the Wildlife Technical Report

- 394-224 | *"Disturbed areas would be reseeded with grass or an appropriate seed mixture to prevent erosion."*
The DEIS and technical appendix should commit to using seed mixtures free of non-native and noxious species.
"The seed mixture would include native plant species and would be free of noxious weeds."
- 394-225 | The DEIS and technical appendix should commit to using mixtures made entirely of native plant species, not an unspecified proportion of native species.
1.2.2 Habitat Fragmentation
"Construction of the proposed project would require varying amounts of vegetation clearing, depending upon the alternative selected. This would result in the removal of habitat or potential habitat for many species, potential alteration of habitat conditions for wildlife species, and possibly habitat fragmentation, increasing the amount of edge habitat within the project area."
- 394-226 | Habitat fragmentation is only a part of habitat loss, which is generally ignored by this section (1.2 Key Issues for Wildlife). The preferred alternative will generally result in little increase in habitat fragmentation, but will result in significant habitat loss. The DEIS and technical appendix need to distinguish those components of the project that will cause habitat loss (ROW clearing; substation construction, road-building, etc.) from those that will cause habitat fragmentation (road-building, etc.) and firmly estimate the areas of habitat loss and level of new habitat fragmentation.
- 394-227 | **1.3 Major Conclusions**
"Because the project area is not known to be a high use area for listed species, the probability of mortality of listed species from collision or electrocution should be low."
The DEIS and technical appendix fail to supply data or references to support this statement. The project area (within 0.25 mile of ROW) is not an appropriate size to measure impacts to most raptor species, which typically have large home ranges. An unvalidated sighting of a northern spotted owl recently occurred near Rattlesnake Ridge, which also provides nesting habitat for peregrine falcons. The DEIS and technical report should provide data that supports this statement.
- 394-228 | **2.1 Date Sources and Study Methods**
"Field visits occurred on..."
The DEIS and technical appendix should describe the field methodology, including what data were collected.
- 394-229 | **2.2 Agencies Contacted**
None of the private landowners along the ROW were contacted.
3.2 Regional Context
"The CRW is owned by the City of Seattle and is subject to Washington State law and the policies of the Seattle City Council, as well as provisions for managing lands in the watershed acquired from the federal government. An HCP has recently been signed that governs the management of the watershed for the next 50 years."

(Appendix B) to mean species listed under the Endangered Species Act, including northern spotted owl, bald eagle, and marbled murrelets. The project vicinity is not a known high use area for any of these species, and given the habitat conditions in the project area, high use by these species is not likely, as described in Section 3.3.2 of the Wildlife Technical Report (Appendix B) and supported by available data including WDFW PHS data (2000) and in Section 3.5 of the HCP for the Cedar River Watershed (City of Seattle 2000).

As described in Section 3.2, Study Area and Approach, of the Wildlife Technical Report (Appendix B), there are two landscape levels at which impacts are analyzed. The first is defined as the project vicinity, is a large area encompassed by Kent-Kangley Road, to the south, Highway 18 to the west, Interstate 90 and Rattlesnake Ridge to the north, and the boundary between the lower and upper Cedar River Watershed, as defined in Map 6 of the Cedar River Watershed HCP (City of Seattle 2000), to the east. The second is a smaller area, 0.25 mile from the centerline of the project, and was chosen because the potential impacts of the project are expected to be focused within that area.

Potential impacts to species with large home ranges are discussed in general terms in Section 4.1.1.1 and changes in the amount of habitat available for species in the project area are discussed in Section 4.1.1.2. Impacts are presented as both a total acreage amount and as a percentage of the amount of that habitat type available within 0.25 mile on either side of the ROW project area. This latter number is provided as an index to the significance of the habitat removal, to give an understanding of how much is being removed compared to the availability in the immediate area.

Data concerning an unvalidated report of a spotted owl near Rattlesnake Ridge was not available to the authors and, given that it is unvalidated, would not change the analysis. Although Rattlesnake Ridge could provide suitable nesting habitat for peregrines, according to recent available information, specifically in the Cedar River Watershed HCP (City of Seattle 2000) and WDFW PHS data (2000), they are not known to nest there.

- 394-230 | The DEIS and technical appendix fail to mention that the primary management goal of the CRW is water quality and water production for the City of Seattle. The DEIS and technical appendix should explicitly state that the proposed action is inconsistent with the CRW HCP.
- 3.3 Study Area and Approach**
- "Wildlife species and their habitats...are discussed at two levels..."*
- 394-231 | The DEIS and technical appendix state that the broad project vicinity will be discussed to address issues related to wide-ranging species, migratory species, and species with large home ranges. However, other than a general description of the area, there was no discussion of the impacts of the project on wide-ranging species, migratory species, and species with large home ranges and their habitats. The DEIS and technical appendix should include this analysis.
- "The project area addressed in a more focused manner includes only the area within 0.25 mi. of the proposed transmission line ROWs."*
- 394-232 | A project area of 0.25 mile from the ROW is too small for the scale of home range sizes and dispersal capabilities of many wildlife species of concern (e.g. spotted owl, pileated woodpecker, northern goshawk, marten, fisher...). The DEIS and technical appendix should include a discussion of the fact that edge effects from the ROW will extend into the surrounding forest for at least 200 m. This should be considered in mitigation for removal of late successional habitat.
- "Within the ROWs, the predominant vegetation type is early seral in mid to late coniferous forest."*
- 394-233 | The DEIS and technical appendix should describe what this means.
- 3.3.1 Wildlife Habitats Within the Project Area**
- "Coniferous forest – late... CFL... Late seral second- or third-growth coniferous forest. Reaching a mature stage but not considered late-successional habitat."*
- 394-234 | The DEIS and technical appendix should describe the difference between seral and successional. There is 50-80 year old coniferous forest along much of the ROW in the CRW, which could be defined as mid-seral, mid-successional, or mature.
- 3.3.2 Species to be Analyzed**
- "For the purpose of this document, species that are federally-listed as threatened or endangered; federal species of concern; and Washington State listed threatened, endangered, sensitive or monitor species with the potential to occur on the west side of the Cascade Mountains were selected for analysis."*
- 394-235 | The DEIS and technical appendix should address all species listed in the CRW HCP.
- 3.3.2.1 Forest Community Dependent Species**
- "An historic spotted owl sighting occurred on lands owned by the Weyerhaeuser Company. This single owl reported in 1993 was over 0.5 mi. from the proposed Alternative 3 ROW and, therefore, was not within the project area."*
- 394-236 | Spotted owls have designated home ranges in the northwest Cascade province of 1.8 miles from an activity center. The 0.5 mile threshold specified here is not appropriate. An unvalidated but reliable spotted owl sighting also occurred near Rattlesnake Lake in early 2001.

- 394-228 | Section 2.1 of the Wildlife Technical Report (Appendix B) was revised to include a description of the field methodology and data collection.
- 394-229 | Comment noted.
- 394-230 | BPA does not agree that the project is inconsistent with the HCP. See Appendix U of the SDEIS and FEIS and Appendix AA.
- 394-231 | Potential impacts to species with large home ranges are discussed in general terms in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B), with the greatest impact expected to be habitat fragmentation. This analysis was expanded in the section to focus on changes in habitat for these species.
- 394-232 | Please see response to Comment 394-227.
- Analysis of potential impacts from habitat fragmentation within the Cedar River Watershed was expanded in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B) to include an analysis on increased edge affect. Habitat loss is analyzed in Section 4.1.2, and is discussed by alternative.
- 394-233 | This is a typographical error and the text has been revised.
- 394-234 | As stated in Section 3.3.1 of the Wildlife Technical Report (Appendix B), these terms are defined in the Vegetation Technical Report (Appendix C), specifically Section 3.4.
- 394-235 | Species that were not included in the analysis were those not expected to occur in the project vicinity, as described in Section 3.3.2 of the Wildlife Technical Report (Appendix B). Inclusion of species that are not expected to occur in the vicinity was deemed unnecessary.
- 394-236 | The spotted owl sighting in the project vicinity was of a single bird and did not have the status of residential single (WDFW 2000) and, therefore, would not be considered a site center around which a home range territory would be established. The 0.5-mile figure was provided as a reference to the proximity of the historic sighting to the project area only. Additionally, habitat for spotted owls in the location of the sighting is no longer present.

"Northern goshawks, ...pileated woodpeckers, and Vaux's swifts are also unlikely to nest within the project area."

394-237 | Though these species are known to nest in late-seral forest, specific habitat requirements for these species may occur in the proposed ROW. Goshawks are known to nest in stands with >15' dbh trees; pileated woodpeckers nest in snags >20" dbh; and swifts nest in hollow trees >20" dbh. There are likely trees/stands with these characteristics along the ROW. The DEIS and technical appendix should include an analysis that considers there will be nesting habitat in CRW in the project area in the future, and that the ROW project will significantly impact that habitat.

"Bats...associated with LS or OG forest, this habitat type is not expected to occur in the project area."

394-238 | This habitat will occur in CRW in the project area under the HCP; the DEIS and technical appendix need to acknowledge and consider this circumstance.

"...project area does not contain suitable nesting habitat for bald eagles."

394-239 | The DEIS and technical appendix should acknowledge suitable habitat will develop in the CRW under the HCP, and should discuss the possibility.

Table 3. Species with Federal or State Status Not Expected to Occur within the Proposed Project Area

394-240 | Habitats for the marbled murrelet, Canada lynx, Johnson's hairstreak, grizzly bear, and gray wolf (along with many other species) may occur in the project area in the CRW in the future.

Table 3: Peregrine falcon is not expected to occur in project area because of lack of suitable nesting and foraging habitat.

394-241 | There is suitable nesting habitat for peregrine falcon within the lower CRW, and the project area is within the home range and would provide foraging habitat. This wide-ranging species with a large home range should be included in the DEIS and technical appendix discussions, especially considering the issue of raptors and electrocution on powerlines.

Table 3: Golden eagle is not expected to occur in project area (no reason given)

394-242 | The DEIS quotes a reference which states that eagles have been observed foraging in clearcuts at moderate elevation west of the Cascade crest, so it is unclear why they eliminated this species from consideration. Further data should be provided, or the species should be included in the analysis.

"Because these characteristics are usually associated with late-successional or old-growth forest, this habitat type is not expected to occur in the project area."

394-243 | Facilitation of these habitats is a primary goal of the CRW HCP. Though these conditions do not currently exist along the ROW, they likely will in the future. The DEIS and technical appendix should consider this.

3.3.2.3 Aquatic Community Dependent Species

"Cascades frog is found... above 2,600 ft in elevation..."

394-244 | This species was found as low as 1,600 ft. elevation in the CRW. The DEIS and technical appendix analysis should be adjusted accordingly.

Data concerning an unvalidated report of a spotted owl near Rattlesnake Ridge was not available to the authors and, given that it is unvalidated, would not change the analysis. Although Rattlesnake Ridge could provide suitable nesting habitat for peregrines, they are not currently known to nest there (i.e., in the Cedar River Watershed HCP [City of Seattle 2000] and WDFW PHS data [2000]).

394-237 | Section 3.3.2.1 of the Wildlife Technical Report (Appendix B) recognizes that the project area may contain suitable foraging and dispersal habitat for these species. According to the Cedar River Watershed HCP (City of Seattle 2000), nesting habitat for Goshawk may occur in the lower Cedar River Watershed, although potential nesting stands listed did not include the types found within the ROW. The HCP also identified pileated woodpecker and Vaux's swift nesting habitat as occurring primarily in the upper watershed. The discussion of impacts was revised to include loss of recruitment habitat for forest dependent species.

394-238 | The discussion of impacts was revised to include loss of recruitment habitat for forest dependent species.

394-239 | See response to Comment 394-238.

394-240 | The discussion of impacts was revised to include loss of recruitment habitat for forest dependent species. This would include marbled murrelets and Johnson's hairstreak. The lower Cedar River Watershed (the project vicinity as defined in Section 3.3 of the Wildlife Technical Report) is not likely to provide habitat for lynx in the future because of the low elevation of the area and the known association of lynx with high elevation subalpine fir/spruce forests (Ruediger, et al. 2000). Future potential development of suitable habitat for gray wolf and grizzly bear is also questionable given the amount of ongoing human activity in and around the watershed.

394-241 | A discussion about peregrine falcons was added to Section 3.3.2, Species to be Analyzed, of the Wildlife Technical Report (Appendix B). The Cedar River Watershed HCP (City of Seattle 2000) does not identify potentially suitable habitat within the lower Cedar River Watershed. However, because Rattlesnake Ledge is within the described project vicinity and could

4.1.1 Alternative Transmission Line Impacts

...assuming that a 150 ft ROW is cleared....

394-245 This assumption is inconsistent with information provided in sections 1.1.1.2 and 1.1.1.5. This analysis also fails to consider impacts associated with clearing new (temporary and permanent) roads and staging areas, as well as short- and long-term impacts of the 50 ft temporary construction easement previously mentioned by BPA (but not mentioned in the DEIS). SPU believes Table 5 significantly underestimates habitat impacts. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action.

4.1.1.1 Impacts

394-246 The DEIS and technical appendix should include a discussion of the impact of exposure to electric and magnetic fields (EMF) and the risk of decreased immune response for limited-mobility species, especially amphibians.

"Disturbance of Wildlife – Noise from blasting would...result in a low-level impact."

394-247 Blasting could result in moderate level impact if blasting is done during breeding season near a nest or den site. The DEIS and technical appendix need to discuss the impacts of blasting and other construction activity (and resulting noise and dust).

"Habitat Fragmentation—Under all of the alternatives, the amount of habitat fragmentation within the project vicinity would increase, resulting in a moderate-level impact. Fragmentation would lead to an increased amount of edge habitat in the area."

394-248 Habitat fragmentation is included here, when it should be a subset of habitat loss. Additional forest fragmentation under the preferred alternative would be small; however, habitat loss would be significant.

4.1.1.2 Mitigation Common to all Alternatives

The DEIS and technical appendix should consider all species included in the CRW HCP and should commit to compensatory mitigation designed to offset habitat loss for these species.

394-249 Most impacts were described in Section 4.1.1.1 as moderate or high, yet the mitigation proposals are primarily minimizations of impact. This is not adequate mitigation for the moderate/high impacts of permanent loss of habitat, permanent habitat fragmentation, mortality, and disturbance. The DEIS and technical appendix should acknowledge this and commit to mitigation actions that include compensatory mitigation, such as creation and protection of equivalent quality habitat of greater area than that lost due to construction of the proposed action. This needs to be habitat that would not already have occurred and/or been protected.

394-250 The fact that high quality low elevation late successional (LS) habitat will be created in CRW under HCP, and that the ROW will permanently fragment this large block of habitat needs to be addressed by the DEIS and technical appendix. Mitigation such as leaving corridors of trees maintained at a specified height through the ROW should be addressed.

Impacts on Threatened, Endangered and other Sensitive Species

394-251 Proposed mitigation would appear to be ineffective for mitigating impacts to species associated with forested and wetland/riparian habitats. Anticipated impacts will only benefit early seral-associated species.

potentially be used by peregrine falcons for nesting, the Wildlife Technical Report was revised.

394-242 Because the project is located at low elevation, it does not meet the definitions given for golden eagle habitat and so golden eagle was not included in the analysis in Section 3.3.2 of the Wildlife Technical Report (Appendix B).

394-243 The discussion about impacts was revised to include loss of recruitment habitat for late successional forest dependent species.

394-244 Elevations for Cascades frog occurrences were not included in the Cedar River Watershed HCP (City of Seattle 2000), therefore this information was not available to the author. Section 3.3.2.3 of the Wildlife Technical Report (Appendix B) was revised to show that Cascades frogs occur at these elevations in the Cedar River Watershed.

394-245 The 150-foot clearing was based on information available when the report was first prepared in late 2000. Section 4.1.2 of the Wildlife Technical Report (Appendix B) has now been revised to reflect currently available data on clearing.

394-246 Information about the electromagnetic effects of transmission lines on limited -mobility species, such as amphibians is not readily available, and the detailed discussion that would be required to address this issue would be outside of the scope of this EIS, therefore BPA will not be undertaking such a study during the environmental review.

394-247 The "low level" impact was derived from the expectation that blasting would be infrequent and that disturbance from blasting would be of short duration. This analysis was expanded in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B).

394-248 Habitat loss is discussed in Section 4.1.2 of the Wildlife Technical Report (Appendix B), and is discussed at the species level by alternative. Habitat loss was added to the list of major issues and also discussed at the broader scale, in Section 4.1.1 of the Wildlife Technical Report.

- 394-252 The DEIS and technical appendix fail to include creating and leaving snags of acceptable height in cleared zones of forested riparian and wetland areas. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.
- 394-253 Minimizing forest vegetation clearing is not adequate mitigation for forest habitat conversion to early successional habitat. The DEIS and technical appendix should acknowledge this and commit to compensatory mitigation that effectively offsets habitat conversion.
- 394-254 Commercial (or ecological) thinning will also need to be conducted. The DEIS needs to include specifics on how this would be accomplished. For example, will BPA pay for thinning on adjacent lands? How many acres? Located where?
- 394-255 Reviewers of the DEIS and this technical appendix need targets for coarse woody debris density (including diameter and decay class) to effectively evaluate the efficacy of this proposal. The species for which this will provide mitigation need to be included in the DEIS and technical appendix.
- Habitat Fragmentation**
- 394-256 Clearing only as much vegetation as necessary does not compensate for the habitat fragmentation created by construction of new ROW, roads, and substation—especially considering the major fragmentation the ROW will create in low elevation late successional forest in CRW in the future. The DEIS and technical appendix should acknowledge this and commit to appropriate compensatory mitigation.
- 394-257 Leaving coarse woody debris is unlikely to address connectivity issues for most species. Even for those species that use coarse woody debris, the microclimatic differences between a closed canopy forest environment and an open environment may prevent use. The DEIS needs to add specifics as to exactly which species will be helped by this proposal.
- 394-258 Leaving some areas intact will be inadequate to mitigate for the fragmentation the proposed action will create. Specific compensatory mitigation to offset this fragmentation need to be added to the DEIS and technical appendix.
- Bird Collision or Electrocutation**
- “...guidelines described in ...1981 report...”
- 394-259 The guidelines BPA will use need to be described in the DEIS in sufficient detail for reviewers to evaluate their effectiveness. Also, more current techniques than from 1981 need to be reviewed and used to hazard-proof the lines from collision and electrocution, especially by raptors. A complete discussion of this issue needs to be included in the DEIS and technical appendix so reviewers can evaluate whether the methods will be effective.
- A discussion of the possibility of placing perches in safe locations and barriers to perches in unsafe location on the towers should be included in the DEIS and technical appendix.
- A complete discussion of proposed methods to minimize bird collision with ground cables should be included in the DEIS and technical appendix.
- A monitoring program to evaluate the effectiveness and longevity of the techniques to minimize/avoid both electrocution and collision should be included in the DEIS and technical appendix, with adaptive management provisions to change the procedures in case of a pre-determined level of mortality.

- 394-249 See responses to Comments 340-002 and 394-235. The details about these mitigation measures will also be included in the Mitigation Action Plan to be subsequently developed for this project.
- 394-250 The discussion about impacts in Section 4.1.2 in the Wildlife Technical Report (Appendix B) was revised to include discussion about the loss of recruitment habitat for late successional forest dependent species. See response to Comment 340-002 for a discussion of mitigation.
- 394-251 See response to Comment 394-249 above.
- 394-252 Information has been added to Section 4.7.2.10 of the SDEIS to address creating and leaving snags where appropriate. Also information has been added to address replanting tree species in areas impacted outside the ROW. Creation of snags and replantings will be done in cooperation with SPU to meet goals as set forth in their HCP.
- 394-253 See response to Comment 340-002.
- 394-254 On lands north of the CRW, BPA would be conducting some pre-commercial thinning. With the exception of a few places, much of the timbered acreage north of the CRW (not counting the plantations) is composed of trees that are about 25 years old. Stable Douglas fir is a species BPA would prefer next to its lines. The 25-year-old stands are currently overstocked with trees. By taking out the smaller, weaker, deformed trees along with the hardwoods and the Western Hemlock, a strong, stable stand of Douglas fir will be left next to BPA's line.
- 394-255 Section 4.1.1.2 of the Wildlife Technical Report (Appendix B) was revised to include information about species that would benefit from leaving coarse woody debris in the project area.
- 394-256 See response to Comment 340-002.
- 394-257 See response to Comment 394-255.
- 394-258 See response to Comment 340-002.
- 394-259 Section of 4.1.1.2 of the Wildlife Technical Report (Appendix B) was revised to reflect more current recommendations and describes techniques that are available.

Disturbance of Wildlife

"Prior to construction, verify that no new bald eagle nests have been constructed in the project area. If any are found, avoid construction within 2,600 feet of the nest during the nesting period."

394-260 | The project area, defined as only that area within 0.25 mile, or 1,320 feet, of the ROW, is insufficient to guarantee that no eagle nests will be disturbed by construction. A minimum of 2,600 ft on either side of the ROW will need to be surveyed for nests. The survey methodology needs to be included in the DEIS and technical report.

394-261 | Nests of other species should also be considered in the DEIS and technical appendix..

"Plan flight paths for helicopters..... do not fly over potential nesting habitat for either northern spotted owls or marbled murrelets in the project vicinity..."

394-262 | "Project vicinity" needs to be defined in the DEIS and technical appendix.. Also, species other than the three mentioned also need to be considered in this section.

4.1.2.1. Alternative 1

"...Alternative 1 would result in low-level impacts on forest community dependent species."

394-263 | Low elevation late successional habitat is extremely uncommon in the entire Puget lowlands. 86 acres of the 120 forested acres to be cut is in the "conifer forest – late" class, i.e., 18–36 inch dbh trees. These habitat patches in CRW will likely develop late successional habitat characteristics over the term of the HCP, which will make this functional habitat for late successional/old growth dependent species. Given the paucity of late successional habitat at low elevation, this proposed habitat conversion will have a significant future impact. The impact cannot be dismissed as low-level. The DEIS and technical appendix should acknowledge this and reclassify this impact as moderate and commit to appropriate and effective compensatory mitigation.

"Because this vegetation removal could result in a loss of productivity in adjacent aquatic habitat but could also be largely mitigated by spanning riparian corridors, this would represent a moderate to low level impact."

394-264 | This paragraph is inherently contradictory. It states that 10 ac of forested riparian habitat will be removed, yet it also says that this removal is mitigated by spanning riparian corridors. The removal of 10 ac of riparian habitat is a permanent habitat loss, for which compensatory mitigation should be required. Simply not removing all riparian vegetation is not adequate mitigation. The DEIS and technical appendix should acknowledge this and commit to effective compensatory mitigation.

Mitigation

394-265 | It is confusing that most of the mitigation proposals listed here are simply a repeat of those already listed in 4.1.1.2 as common to all alternatives. It would be clearer if the DEIS and technical appendix listed only additional mitigation specific to each alternative.

"Minimize soil disturbance within or adjacent to wetlands and stream banks to the extent possible."

394-266 | The term "extent possible" should be quantified in the DEIS and technical appendix, and should include methods for minimizing soil disturbance described. In areas where soil disturbance cannot be minimized, adequate compensation mitigation should be provided and described.

The details about these mitigation measures will be included in the Mitigation Action Plan to be subsequently developed for this project.

Section 4.1.1.2 of the Wildlife Technical Report (Appendix B) was revised to include information about methods to minimize bird collisions.

394-260 | See response to Comment 394-227. As stated in the Mitigation Measures, Section 4.1.1.2, a distance of 2,600 feet will be the standard for bald eagle nests. The bald eagle nest surveys will be conducted via aerial survey methods using a helicopter to fly above and to the side of potential bald eagle nesting habitat and visually searching for nests. These surveys will be conducted by a qualified biologist and the method has been approved by the WDFW and USFWS.

394-261 | The Wildlife Technical Report, Appendix B and Section 4.7.2.10 of the SDEIS have been revised to add mitigation measures to avoid impacting raptor nests.

394-262 | The project vicinity is described in Section 3.3, paragraph 1 of the Wildlife Technical Report (Appendix B).

394-263 | The finding of a low level impact was based on the definitions given in Section 4.0 of the Wildlife Technical Report (Appendix B), reduction of a habitat type that is very common in the project vicinity. Within the defined project area (0.25 mile either side of the proposed center line), forest removal under Alternative 1 would represent 5 percent of the habitat that is available. In the lower Cedar River Watershed, the HCP identifies 12,255 acres of second growth forest, of which 120 acres of forest clearing would represent 0.98 percent of the habitat that is available.

394-264 | See response to Comment 340-002. Section 4.1.2.1 of the Wildlife Technical Report (Appendix B) was revised so that spanning riparian reserves was no longer termed mitigation. The details about mitigation measures will be included in the Mitigation Action Plan to be developed for this project.

394-265 | Comment noted.

"Mitigation measures to minimize or reduce potential impacts to species dependent upon early seral habitats: Create snags along edges..."

394-267 | How many snags will be created? What diameter and height of trees will be used? What methods will be used to create the snags? The DEIS and technical appendices need to provide these specifics so reviewers can adequately evaluate the efficacy of the proposal.

4.1.3.1 Access Roads Impacts

"A portion of this clearing would coincide with clearing for the transmission ROW and so is not additive."

394-268 | Reviewers need to know exactly how many acres will coincide with clearing the ROW and how many will be additional in order to evaluate the impact of total cleared area. In addition, habitat converted to road (impervious surface, no vegetation) is not equivalent to habitat converted to grass/forb/shrub, so needs to be compensatorally mitigated separately.

4.1.3.2 Mitigation

"Avoid building new roads within or adjacent to wetlands."

394-269 | Is this a firm commitment to building no roads in wetlands or their buffers? If so, the DEIS and technical appendix should clarify this commitment and define buffer width. If this is not a commitment, then the area of road estimated to be built in wetlands, which wetlands will be impacted, and the appropriate compensation mitigation should be included in the DEIS and technical appendix.

4.1.5 Cumulative Impacts

"Within the CRW, vegetation removal and thus habitat alteration is expected to be minimal, as described in the HCP (City of Seattle 1998, 2000). For this reason, clearing associated with the proposed project would be the greatest foreseeable impact in this portion of the project area. The HCP also outlines plans to close certain roads within the CRW, which could potentially mitigate impacts from proposed new access roads that would be constructed in conjunction with the proposed project."

394-270 | Habitat is dynamic and is constantly changing. The DEIS does not consider how the habitat in the CRW will change over time. The road decommissioning program in the CRW HCP can be viewed as mitigation for past road-building projects in the CRW, and should not be used as mitigation for a BPA project. BPA must mitigate for their own impacts, and cannot use commitments of landowners in parts of the project area as mitigation for BPA's actions. The DEIS and technical appendix should explicitly acknowledge this circumstance and should omit this statement.

5.3.2 Cedar River Watershed Habitat Conservation Plan

"The CRW HCP (City of Seattle 1998, 2000) was prepared by SPU to establish a comprehensive management plan for long-term management of the CRW. The HCP includes numerous provisions intended to maintain the quality of wildlife habitat and the health of wildlife populations in the CRW. Objectives of the HCP include meeting the legal requirements of the ESA, contributing to the conservation of unlisted species as appropriate, providing a net benefit over current conditions to both listed and unlisted species, and developing conservation strategies for at-risk species and their habitats."

394-271 | The DEIS and technical appendix should explicitly acknowledge the CRW HCP regulating agencies (e.g. USFWS, NMFS) and the fact that the proposed action not a "covered activity" under the HCP.

394-266 | See response to Comment 340-002.

394-267 | See response to Comment 394-252.

394-268 | Section 4.1.3 of the Wildlife Technical Report was revised to address currently available data about construction of access roads. The details about these mitigation measures will be included in the Mitigation Action Plan to be developed for this project. BPA is proposing to add approximately 1.4 miles of new roads within the CRW, and abandon approximately 0.6 mile of existing roads. The net total of new access roads would be about 0.8 mile, encompassing an area of approximately 2 acres.

394-269 | No roads would be built in wetlands. Some new roads would be built in buffers.

394-270 | Section 4.1.5 of the Wildlife Technical Report (Appendix B) was revised so that it does not appear that road removal by others is being considered mitigation for the project. Road closures by the City of Seattle were included in this discussion on the basis of the definition of cumulative impacts, which is to include reasonably foreseeable actions in the project area.

394-271 | BPA acknowledges that the transmission project was not specifically contemplated by the HCP. The HCP was undertaken by the city to include activities carried out or authorized by the City of Seattle, and not for BPA. The HCP did recognize, however, that new rights-of-way may need to be given. See, for example, Chapter 4.2-73.

**Kangley-Echo Lake Transmission Line Project DEIS
Appendix C – Final Vegetation Technical Report**

Comments from Seattle Public Utilities
September 4, 2001

DEIS Appendix Citations in italics; SPU comments in normal font.

1.2.3 Removal of Forest within the Cedar River Watershed

“The HCP for the CRW proposes strict limitation of logging and other forest conversion within the watershed.”

394-272 | The proposed action is not a “covered activity” under the Cedar River Watershed (CRW) Habitat Conservation Plan (HCP). The DEIS and technical appendix should clearly disclose that the proposed action is not a “covered activity” and provide an evaluation of this circumstance.

1.3.1 Uniformity of Vegetation Communities Between Alternatives

“Because most of the project area is second-growth forest that has been actively managed since around 1920, the existing forest stands are more or less uniform, with only slight variation in age and size classes between stands.”

394-273 | Though forests in the project area have been harvested in the past, existing forest communities provide a high diversity of habitats for forest-dwelling species. More importantly, the CRW HCP provides long-term protection status to forests in the CRW. Thus, these forests will continue to age and provide increasingly unique, low elevation conifer forest habitats in the rapidly developing Puget Sound region. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA’s environmental analysis should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

2.1 Data Sources and Study Methods

“Washington Department of Natural Resources (WDNR) Natural Heritage Program (NHP) lists of threatened, endangered, and other special-status plant species.”

394-274 | Though this database is an important resource, it relies on contributed information and should only be used as a crude guide to species distributions.

“It was also assumed...that vegetation in an additional 75 ft zone on either side of the cleared area would be partially cleared ...”

394-275 | This is inconsistent with the statement in Appendix B and information provided in Section 1.1.1.5 of this report that indicate 50 to 60 ft would be partially cleared. The DEIS, its technical appendices, and associated permitting documents need to present a complete and consistent description of the proposed action. Such inconsistencies make this DEIS difficult to review and evaluate. In any case, if this approach applies to Alternative 1, as the text suggests, does this mean that both sides of the 300 ft total ROW will be treated in this way, resulting in a 450 ft wide managed ROW? The DEIS and technical appendage should be explicit about this.

394-276 | This analysis also apparently fails to describe impacts associated with clearing new (temporary and permanent) roads and staging areas, as well as short- and long-term impacts of the 50 ft temporary

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394-272 | See response to Comment 394-271.

394-273 | Comment noted.

394-274 | Comment noted.

394-275 | The distance used was changed from 60 feet to 75 feet. Partial clearing within the additional 75-foot zone (on the east side of the ROW) would be focused in those trees with sufficient height to strike the transmission line and/or towers in the event of a fall.

394-276 | Approximately 2 acres would be cleared to accommodate the new access roads within the CRW, all of which would be located within the new or existing right-of-way. No impacts have been ascribed to any staging areas, since it is not known at this time where those areas would be located. Typically, BPA’s construction contractors select the necessary staging areas and arrange their use in concert with the property owner. No staging areas would be located within the CRW at the request of the landowner.

construction easement previously mentioned verbally by BPA to CRW staff (but not mentioned in the DEIS). The DEIS and its technical appendices should explicitly discuss impacts associated with temporarily disturbed areas. SPU believes Table 5 underestimates habitat impacts.

2.2 Agencies Contacted

394-277 | No private landowners were contacted.

3.1 Regional Overview

"The project area lies almost entirely within second-growth forests that have been maintained in timber production for most of the last 150 years."

394-278 | This is true. However, there is no mention that the CRW HCP effectively places CRW forests in long-term protection status. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

The DEIS and technical appendix indicate the most prevalent plant communities in the project area are TSHE/POMU and TSHE/TITR communities. However, paragraph 4 of this section indicates vegetation in the project area is dominated by PSME (Douglas-fir). The DEIS and technical appendix need to present a complete and accurate analysis of vegetation and potential impacts.

3.2 Regulations, Standards, and Guidelines

"The CRW HCP outlines proposed regulation of activities within the watershed."

394-279 | Again, there is no mention that the CRW-HCP effectively places forests in the CRW in protection status and that forest management activities in the CRW are for restoration purposes. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

3.3 Project Area and Approach

"The project area for vegetation is a 0.5 mi. corridor centered on the ROWs of the proposed alternatives."

394-280 | The definition of project area is inconsistent with Final Wildlife Technical Report, which describes the project area as being within 0.25 mile of the ROW. The DEIS and technical appendices need to indicate why the study area or project area for this environmental analysis varies among disciplines.

3.4 Transmission Line Alternatives

"Twelve major vegetation cover types were defined and mapped for this project (Figure 3). Their relative areas are shown in Figure 4. The 12 cover types are described below:

- *Coniferous forested, early seral ...generally less than 20 years old...*
- *Coniferous forested, mid-seral ...range in size from 12 to 20 in. DBH and ... generally in the range of 15 to 35 years...*
- *Coniferous forested, late seral ...tends to be 36 to 75 years old... range in size from 18 to over 36 in..."*

394-281 | These definitions of seral classes are not accurate. While many variables are involved in the identification of seral class, most professionals in this field would not consider a 40- or 60-year-old west-Cascadian Douglas-fir forest as late-seral. The DEIS and technical appendix should use standard definitions of seral class.

394-277 | Comment noted.

394-278 | The plant associations given in the report are correct. TSHE/POMU, TSHE/TITR and other *Tsuga heterophylla* associations are frequently dominated by Douglas fir (*Pseudotsuga menziesii*). Plant associations are based on regeneration and climax communities, not on current dominance. True Douglas fir plant associations in the Pacific Northwest are much drier than the Cedar River Watershed sites. A true PSME (Douglas fir) plant association in the west Cascade low forests is extremely uncommon, and is not found within the project area.

394-279 | Comment noted.

394-280 | A "0.5-mile [wide] corridor centered on the ROW" and an area "within 0.25 miles [extending from each side the centerline] of the ROW" are descriptions about an equivalent area.

394-281 | The definitions of "seral" and specific class labels are detailed within the text. While the terms used may not fall within standard forestry practice, that does not preclude the use of the words. The definition and explanation of the terms' use provide a clear understanding of the intended meaning.

"Forested communities within the project area have been further sorted into one of four age classes. Due to the history of timber management in the project area, the age classes chosen reflect typical rotation and/or thinning intervals in timber production."

394-282 Timber production schedules are no longer relevant in CRW. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut, not on typical rotation or thinning intervals for timber production.

394-283 The DEIS and technical appendix fail to distinguish the distinct, regenerated forest habitat that lies in a strip adjacent to and west of the preferred option. This narrow strip of forest appears to have been cleared of vegetation during construction of the original ROW, but has been allowed to regenerate. As a result, there is an approximately 50 ft band of younger mixed forest (approximately 30 to 50 years old) immediately adjacent to roughly 60 percent of the existing ROW in the CRW. SPU can provide maps delineating this strip. This forest strip coincides with the location of the proposed preferred alternative. The forest outside this strip is generally approximately 60 to 80 years old. The DEIS and technical appendix fail to accurately describe existing conditions. BPA's environmental analysis for this project should be conducted using accurate observations of the forest resources it proposes to permanently clearcut.

3.7.2 Survey and Manage Species

"Therefore, Survey and Manage requirements are not applicable to this project."

394-284 This is not clear. If BPA owns land "in fee," then that land is federally owned and managed. The DEIS and technical appendix should clarify why such ownership allows BPA to avoid Survey and Manage requirements?

3.8 Noxious Weeds...

"Scotch broom commonly occurs in the highly disturbed areas of clear-cuts, as well as along the existing transmission line..."

394-285 This statement suggests BPA has actively allowed noxious weeds to invade and persist in their existing ROWs. In fact, this is the case along BPA ROW in the CRW. The DEIS and technical appendix should recognize and explain this existing management approach, and then describe exactly how BPA proposes to manage its existing and proposed ROWs for noxious weeds in the future. If BPA intends to neglect active and effective management of noxious weeds in its ROW, as it does now, then the DEIS and technical appendix need to disclose this information.

The DEIS and technical report should acknowledge that two new noxious weeds have been located in the lower portion of the CRW: yellow hawkweed (*Hieracium caespitosum*) and spotted knapweed (*Centaurea maculosa*). The environmental analysis should take these species into consideration.

4.0 Environmental Consequences and Mitigation

"Table 3" and "Table 4"

394-286 These tables include redundant information; the numbers contained therein do not correlate between tables. The DEIS and technical appendix need to present pertinent data clearly.

4.1.1.1 Impacts

"We have used 75 ft on either side of the ROW as an assumption for the analysis."

394-282 With regard to the first point, commercial logging in the Cedar River Watershed HCP is now strictly limited; however, the age distribution of trees within the project area still reflects logging practices in the recent past. The characterization of the present-day stands is based on past practice, with no implication or inference for future management practices.

394-283 The reviewer agrees with your comment and the age-class mapping of the referenced area was reevaluated.

394-284 A revision is not required because Survey and Manage requirements apply to USDA/U.S. Forest Service and USDI/Bureau of Land Management lands only (see *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl, USDA/USFS and USDI, BLM, April 1994*).

394-285 See response to Comment 394-193.

394-286 The reviewer agrees with your comment and reevaluated data collected for Table 3 to make the acreage totals in that table consistent with acreage totals elsewhere in the document.

- 394-287 This number is not consistent through the DEIS. In 4.1.3.1 of this technical appendix the width is 45 ft; 50 ft was widely referenced in the DEIS. The environmental analysis used in the DEIS and its technical appendices needs to be based on complete and consistent description of the proposed action.
- "In some cases, forested stands, even within the maintained ROW, would not require clearing."*
- 394-288 The DEIS and technical appendix should specify where these cases occur in the CRW, especially relative to the Cedar River.
- This section also fails to mention that an acre or less of wetland habitat will be permanently converted due to filling, as is described in the Final Wetland Technical Report.
- 4.1.1.2 Mitigation**
- 394-289 The DEIS and technical appendix make no commitment to mitigate for the loss of forest habitat, or other vegetated habitat. While the feasibility of meaningfully mitigating for the loss of forest habitat is debatable, BPA should commit to mitigating the permanent loss of the 150 to 200 acres of long-term forest it proposes to clearcut.
- "Develop and implement aggressive vegetation management programs to limit colonization by non-native species and eradicate noxious weeds within the transmission line ROW."*
- 394-290 The DEIS and technical appendix should describe methods for maintaining native plants and managing noxious weed species without the use of herbicides (which are not allowed in the CRW) so reviewers can evaluate their potential efficacy. Statements indicating "an aggressive vegetation management program" will be developed and implemented are inadequate and not able to be evaluated by reviewers. The DEIS and technical appendix should describe the noxious weed management program (without herbicides) that will be implemented. A monitoring program (including adaptive management) needs to be part of that program.
- Also, this statement implies BPA implements active and effective noxious weed management programs. In fact, however, the BPA ROW in (and outside of) the CRW is a significant avenue of dispersal and location of infestation for noxious weeds. The DEIS and technical appendix should recognize and explain this existing management approach, and then describe exactly how BPA proposes to manage its existing and proposed ROWs for noxious weeds in the future. If BPA intends to neglect active and effective management of noxious weeds in its ROW, as it does now, then the DEIS and technical appendix need to disclose this information.
- "Use only certified weed-free straw..."*
- 394-291 Weed-free straw will typically have been treated with herbicides. The DEIS and technical appendix need to address this situation, including the specific herbicides and their quantities that would be introduced to the CRW. The DEIS and technical appendix need to evaluate such contamination and the associated risks to water quality as part of this environmental analysis. Also, SPU is aware that certified weed-free straw is difficult to obtain locally. The DEIS and technical appendix should describe exactly what "certification" means in this case, who certifies that straw, and under what conditions that straw will need to have been grown to be certified.
- 4.1.3.1 Alternative 1 Mitigation**
- 394-292 BPA proposes to permanently convert 118 ac of forest to early successional habitat. This forest would otherwise have been managed to achieve late successional characteristics in CRW. The DEIS and technical appendix should commit to compensatory mitigation for such conversion.

- 394-293 Consistently throughout the DEIS and its technical appendices, there is no acknowledgement that the CRW HCP effectively places forests in the CRW in protection status and that forest management activities in the CRW are for restoration purposes. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.
- 4.1.3.6 Access Roads**
- "For the purposes of assessing new access road impacts, a 20-ft road cross section was assumed. Existing access roads are generally 24 ft across, and the actual new access road width would be 16 ft."*
- 394-294 This information is not consistent within the DEIS. In Chapter 2 (2.1.1.5), new roads outside of the ROW would require a 50 ft easement, which includes 16-22 ft of road surface and 10 ft of drainage ditches on either side. The environmental analysis in the DEIS and its technical appendices should be based on consistent dimensions of the project features. The DEIS and technical appendices should commit to compensatory mitigation for permanently converting forest and other vegetated habitats to impervious road surfaces. The DEIS and technical appendix should also evaluate the impacts of constructing mitigation (such as stormwater ponds) for water quality and quantity that will likely be required by the National Marine Fisheries Service for constructing 1 to 2 miles of new impervious surface in basins tributary to waters that support threatened species such as Chinook and coho salmon. Also, in this section, the DEIS and technical appendix should specifically consider BMPs for preventing erosion and protecting water quality. This section also fails to discuss or account for temporary roads and staging areas.
- 4.1.3.7 Cumulative Impacts**
- 394-295 Cumulative impacts are incompletely evaluated. The DEIS and technical appendix should present a complete evaluation of cumulative impacts. Commitments to compensatory mitigation should be included in that evaluation.
- 4.2.2.1 Impacts**
- "Any such spills or leaks could kill or injure vegetation in the immediate vicinity of the spill."*
- 394-296 To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. The DEIS and technical appendix should indicate how all spills will be prevented in the CRW.
- 4.2.1.2 Operation and Maintenance Mitigation**
- "Mitigation would follow policies and procedures adopted by BPA..."*
- 394-297 These policies and procedures should be summarized. It is not reasonable to expect reviewers to obtain and review the EIS referenced here, especially considering the short duration of the public comment period.
- 4.2.2.1 Access Roads Impacts**
- 394-298 Impacts of potential spills of hazardous materials were considered to be low to adjacent vegetation. However, any spill of a toxic substance in CRW should be considered a high impact because of the risks to water quality. To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. The DEIS and technical appendix should indicate how all spills will be prevented in the CRW.

- 394-293 Comment noted.
- 394-294 Road information has been updated in the SDEIS. See Sections 2.1.1.5 and 4.4.2.1 of the SDEIS. See response to Comment 340-002.
- 394-295 See response to Comment 340-002.
- 394-296 See response to Comment 394-139.
- 394-297 See response to Comment 394-193.
- 394-298 See response to Comment 394-139.

5.6.1 Cedar River Watershed Habitat Conservation Plan

"The CRW HCP (City of Seattle 1998, 2000) was prepared by SPU to establish a comprehensive plan for long-term management of the CRW. The HCP includes numerous provisions intended to maintain the quality of fish habitat and the health of fish populations in the CRW. Many of these provisions apply to management procedures such as fish hatchery operation or manipulation of instream flows and thus are not directly relevant to this analysis. Other provisions address the effects on fish and their habitat that can result from forest removal and forest road construction and maintenance."

394-299 | With regard to forest resources, the proposed action is inconsistent with the CRW HCP. The DEIS and technical appendix should disclose that the proposed action is not consistent with the CRW HCP.

5.6.4 Washington Department of Natural Resources Forest Practices Rules

"The WDNR Forest Practices Rules (WAC 222) describe the types of forest practices allowed under the State of Washington Forest Practices Act (RCW 76.09). They divide forest practices into four classes, based on potential impact to public resources, and outline the processes for permitting of each class."

394-300 | The DEIS and technical appendix should describe riparian buffer requirements as contained in the Forest Practice Rules.

6.0 Individuals and Agencies Contacted

394-301 | This section is redundant with Section 2.2. of this technical appendix.

394-299 Please see response to Comment 394-230.

394-300 You are correct in identifying that this information was not provided in the Vegetation Technical Report (Appendix C). However, we do not feel it is necessary to collect or present the information because it would not substantively contribute to the impact analysis, or the identification of potential significant impacts as required under the National Environmental Policy Act.

394-301 Comment noted.

**Kangley-Echo Lake Transmission Line Project DEIS
APPENDIX D Final Wetlands Technical Report**

Comments from Seattle Public Utilities
September 4, 2001

DEIS Appendix Citations in italics; comments in normal font.

1.1.1.9 Site Restoration and Clean-up

"Disturbed areas would be reseeded with grass or an appropriate seed mixture to prevent erosion. The seed mixture would include native plant species and would be free of noxious weeds."

394-302 The DEIS needs to be more specific regarding "restoration." Restoration is more than just reseeding with an "appropriate" seed mixture. The DEIS and technical appendix should commit to restoring the native plant communities disturbed by the construction and operations. The plantings and seed mixtures should include only native plants.

1.3 Major Conclusions

"Potential fill and excavation impacts from the construction of towers and roads would be avoided by strategically locating towers and roads outside of wetland areas where possible and by spanning wetlands."

394-303 The DEIS should provide more detailed description of these project features. Impacts to wetlands can not be evaluated until location of towers and roads are specified. Given this lack of detail and considering other constraints on tower locations (e.g., staggered location with existing towers, stream crossings, topographic constraints, spacing), it appears that placement of towers in wetlands is probable. However, as evidenced by information presented in the project's biological assessment (BA), BPA has identified locations for towers and new roads and so should be able (in the DEIS and its technical appendices) to estimate such impacts. The DEIS and the technical appendix need to present a complete and accurate environmental analysis, which includes the disclosure of such known project characteristics. The DEIS should discuss these fill impacts and the compensatory mitigation BPA proposes.

**2.0 Study Scope and Methodology
2.1 Data Sources and Study Methods**

"A basemap of potential wetland locations was created by superimposing the transmission alternatives over the wetlands location data provided by the aforementioned data sources. This map was used to aid the field survey of wetlands within the ROWs. The wetland reconnaissance survey focused on field-verifying selected areas of the wetland basemap that may be impacted. The approximate wetland boundaries were then field-mapped on the orthophotos provided by BPA. Due to the size of the wetlands and their readily apparent signature on the aerial photographs, the boundaries were sketched on 1:24,000-scale aerial photographs and subsequently digitized..."

394-304 This methodology fails to mention what criteria were used to identify and delineate wetlands. Presumably, Section 404 jurisdictional wetlands are the subject of interest, but this is not clear. Additionally, the remote sensing approach to wetland identification and the scale at which they were mapped (1:24,000) indicates this exercise resulted in crude approximations of wetland boundaries, not jurisdictional wetland delineations. Also, an important source of wetland information, the SCS soil survey, was not listed as one of the data sources. In contrast, SPU observed flags delineating more precise wetland boundaries in the proposed corridors, but these flags are not mentioned in the methodology and the delineated boundaries do not conform

394-302 See response to Comment 394-147.

394-303 A detailed description of potential impacts to wetlands associated with Alternative 1 is provided in Section 4.9.2 of the Supplemental Draft EIS. Following the release of the draft EIS, BPA conducted a wetland delineation of the wetlands within the proposed right-of-way and substation expansion area. Although a total of 35.63 acres of wetlands and 20,277 linear feet of streams were delineated in the project area, no permanent fill material would be placed within waters of the United States, including wetlands, during construction of the proposed project.

See also response to Comment 340-002.

394-304 and -305 Additional information regarding methods used to identify wetlands has been added to the Wetlands Technical Report (Appendix D) in Section 2.1, Data Sources and Study Methods. For the purposes of preparing the initial Wetland Technical Appendix, no waters of the United States were "delineated;" subsequently no jurisdictional wetland boundaries were established for the purposes of the DEIS. Wetland biologists located wetlands, including waters of the United States within the 500-foot survey corridor as regulated by the U.S. Army Corps of Engineers (Section 404), the Washington State Department of Ecology, and King County. Methods used for identifying and locating waters of the U.S. are listed in Section 2.1, Data Sources and Study Methods, of the Wetland Technical Report (Appendix D).

Wetland and stream boundary flags observed by SPU were established in April 2001 for the purposes of guiding the placement of tower and access road locations, and to minimize the potential for wetland and stream impacts due to road and tower construction. The wetland and stream boundaries flagged in April 2001 occurred after the drafting of the Wetlands Technical Report (Appendix D) in late 2000. These boundaries were a reconnaissance of approximate jurisdictional wetland and stream boundaries, using the 1997 Washington State Wetlands Identification and Delineation Manual, the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual, and King County's Environmentally Sensitive Areas Ordinance (King County Code, Chapter 21A.24). Official wetland boundaries

394-305 | to those presented in the technical appendix. SPU is also skeptical that signatures on the 1:24,000 aerial photographs were adequate to delineate wetland boundaries. Red alder-dominated wetlands could be evident, but conifer- (e.g., redcedar) dominated boundaries are likely to be obscurely evident. The DEIS and its technical appendix need to discuss these methodological short-comings and provide a complete discussion of the wetland methodology used to support the environmental analysis.

3.3 Study Area and Approach

394-306 | This section is primarily a summary of the results. This technical appendix should better describe the vegetation, soils, and hydrology of all wetlands. For example, it is never clear if PFO-dominated wetlands are dominated by deciduous or coniferous species. This technical appendix also needs to describe buffer habitats and anticipated impacts to buffers. There is no analysis or table showing impacts to wetland and buffer habitats, where temporary and permanent impacts are examined by habitat class for each alternative. The DEIS and the technical appendix need to present a complete analysis of wetlands and potential impacts.

Table 1. Summary of Wetlands Present within the 150 ft ROW by Transmission Line Alternative

394-307 | Wetlands tributary to waters bearing Chinook and/or coho would be classified as Class 1 wetlands, not Class 2, as per the King County wetland rating system, Criterion 1a. Thus, essentially all such tributary wetlands in the project area would be considered Class 1 wetlands. Also, wetlands should be rated using the Washington State Department of Ecology Wetland Rating scheme. Rating forms should be appended to the technical appendix, and this rating added as a new column in Table 1. The "Total Acres" column in Table 1, as well as the entirety of Table 2, are not informative. Rather, the total wetland acreage that will be impacted by the proposed action is of interest; this should be broken out by temporary and permanent impacts, by Cowardin habitat class, by King County rating, and by Ecology rating—for each alternative. The DEIS and technical report need to present an organized, clear analysis of existing conditions and potential impacts to wetland habitats and their buffers.

"Commonly these wetlands were associated with depressional areas that receive water from overland runoff and precipitation."

394-308 | This is an incorrect assumption. Many wetlands in the project area have hydrology supported by groundwater discharge. For example, most of the wetlands on the south side of Brew Hill are supported by groundwater discharge, rather than overland flow and precipitation. Pertinent environmental analyses (as should be contained in the DEIS and its technical appendix) are based on accurate field observations rather than on speculation or assumption. Sound information on natural resources in the CRW is easily obtained through consultation with SPU Cedar Falls biologists.

3.4 Transmission Line Alternatives 3.4.1 Alternative 1

"Species diversity is low within the overstory and understory. The depressional wetlands occupying the south bench area of Brew Hill provide flood storage and flood flow moderation functions and wildlife habitat."

394-309 | The standard underlying this conclusion is not stated. Species diversity is low relative to what standard? SPU observations of the wetlands in and near the ROW in the CRW indicate there is considerable diversity in these wetland areas. These wetlands also provide significant water quality and quantity functions to Rock Creek. Wetlands in the riparian area along the Cedar River are not identified in Figure 3 or in the report. The DEIS and its technical appendix present such scant site-specific information for the individual wetlands that accurate review and evaluation of BPA's conclusions is not possible. Also, the map scale is too small to verify boundaries. The DEIS and its technical appendix should contain sufficient site-specific information and specific boundary information such that an accurate and pertinent environmental analysis is possible.

4.0 Environmental Consequences

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were not "delineated" during this reconnaissance. See response to Comment 394-303.

The 1:24,000-scale orthophotos were used as an aid for the creation of a base map of approximate wetland locations. This field map was then used in the field by wetland biologists to guide the reconnaissance of approximate wetlands locations. The map was then altered to reflect wetland boundaries as observed in the field. The orthophotos were not used to determine the vegetation community composition of wetlands; this was determined through a ground reconnaissance.

394-306 | Brief descriptions about wetland community types and buffer habitats have added the information to the Wetlands Technical Report (revised Appendix D), Section 3.3, Study Area. See also response to Comment 394-303.

394-307 | King County Environmentally Sensitive Areas (Chapter 21A.06.1415 A.1.) states that Class 1 wetlands are those "which have present species listed by the federal or state government as endangered or threatened or outstanding actual habitat for those species." Concerning fisheries, the Landsburg Diversion Dam on the Cedar River currently presents a passage barrier to all anadromous fish species including bull trout (Coastal/Puget Sound DPS [Threatened]), chinook salmon (Puget Sound ESU [Threatened]), and coho salmon (Puget Sound/Strait of Georgia ESU [Candidate]). (Please refer to the Final Biological Assessment for the Kangley-Echo Lake Transmission Line Project 2001 for more information). Thus, no wetlands within the Cedar River Watershed and within the Alternative 1 construction corridor meet provision 21A.06.1415 A.1 as presumed by your comment. We understand that a fish ladder at the dam is being constructed and these species may be present in the future. Wetlands located within the Raging River Watershed may provide riparian habitat for threatened anadromous fish species.

To ensure proper rating and protection of wetlands, prior to permitting and construction all wetlands will be delineated and rated using both King County's Environmentally Sensitive Areas Ordinance (King County Code, Chapter 21A.24) and the Department of Ecology's *Washington State Wetlands Rating System for Western Washington, Second Editions, August 1993*,

"...clearing vegetation within the 150 ft wide ROW..."

394-310

This assumption is inconsistent with information provided in sections 1.1.1.2 and 1.1.1.5. This analysis also fails to consider impacts associated with clearing new (temporary and permanent) roads, as well as short- and long-term impacts of the 50 ft temporary construction easement previously mentioned by BPA (but not mentioned in the DEIS). There is no table that describes areal impacts for all these (and other) potential disturbance activities.

4.1 Construction Impacts

4.1.1 Impacts Common to All Action Alternatives

4.1.1.1 Impacts

Wetland Impact Avoidance and Minimization—

"...Criteria used by BPA to select the alternative ROW included avoiding known high-quality natural resources such as wetlands and streams. Any wetlands identified along the selected transmission line ROW would be avoided where feasible. Feasibility would be determined by land ownership, road configuration, spanning to avoid wetlands, construction costs, reducing sharp angles and bends in the ROW, and access."

394-311

According to Chapter 2 of the DEIS, avoidance of wetlands was not a factor in selecting the alternative ROWs, although Alternative 1 does have less clearing. Given the constraints in locating a high-voltage transmission line within any of these alternatives, flexibility in location to avoid wetlands is unlikely. Careful siting of transmission towers is perhaps one way to minimize wetland impacts, but neither the DEIS or technical appendix has sufficient information to determine if this is feasible or was evaluated in the environmental analysis. The DEIS and technical appendix should have sufficient information to be able to assess the feasibility of minimizing wetland impacts by siting towers outside of wetlands.

Vegetation Impacts

394-312

This document fails to mention that these permanent alterations would be considered a **moderate** impact to wetlands, using criteria presented in Section 4.0.

Hydrology Impacts and Wildlife Impacts

394-313

The DEIS and technical appendix should describe the level of intensity characterizing these impacts, using criteria presented in Section 4.0.

4.1.1.1 Mitigation

394-314

This list of best management practices is meaningless in terms of mitigating impacts. What is BPA really committing to here? There is no discussion of compensatory mitigation.

4.1.1.2 Mitigation

394-315

This laundry list of "standard" mitigation measures is relatively meaningless, and even conflicting. What is BPA really committing to here? As with other mitigation measures recommended for this project, there is no compensatory mitigation mentioned, despite a range of impacts identified in Section 4.1.1.1. The DEIS and technical appendix should describe meaningful mitigation actions, including compensatory mitigation that will offset unavoidable impacts to wetlands and their buffers.

- *Delineate wetlands before final design and flag for avoidance during construction.*

394-316

Wetlands need to be delineated for the DEIS to assess potential impacts. Delineation of wetlands is not a mitigation measure.

Publication 93-74. While this information will be used for the impacts analysis and compensatory mitigation planning, we do not feel it is necessary to collect or present the additional ratings information at this time because it would not substantively contribute to the impact analysis, or the identification of potential significant impacts as required under the National Environmental Policy Act. However, additional information concerning potential impacts to wetlands from the construction of the transmission line corridor has been provided in Section 4.1, Construction Impacts, of the Wetlands Technical Report (revised Appendix D). (Please also see response to Comment 394-303.)

394-308 Comment noted.

394-309 You are correct in identifying that this information was not provided in the Wetlands Technical Report (Appendix D). However, we do not feel it is necessary to collect or present the information because it would not substantively contribute to the impact analysis, or the identification of potential significant impacts as required under the National Environmental Policy Act. See response to Comment 394-303.

394-310 Please see response to Comment 394-303.

394-311 You are correct in identifying that specific tower sites were not provided in the Wetlands Technical Report for Alternatives 2-4B (revised Appendix D). However, we do not feel it is necessary to present the information because it would not substantively contribute to the impact analysis, or the identification of potential significant impacts as required under the National Environmental Policy Act. See response to Comment 394-303. A detailed description of potential impacts to wetlands associated with Alternative 1 (the Proposed Action) is provided in Section 4.1, Construction Impacts, of the Wetlands Technical Report (revised Appendix D). This approximation of wetland impacts was made using the wetlands reconnaissance information and BPA's current roads and tower siting plan (Figure 5 in the Wetland Technical Report).

394-312 Please see response to Comment 394-303.

- *Ensure noxious weed infestations do not become a problem in wetlands by washing all construction vehicles and conducting a weed inventory one year after construction to verify that weeds have not been introduced.*

394-317 | How will BPA respond if weeds are introduced? There is no weed management plan or commitment in the DEIS. Herbicides are not allowed in the CRW, which makes weed management in the CRW particularly challenging. Considering that BPA's existing ROW is a major present-day corridor for weed dispersal and location of infestation in the CRW, SPU is obviously concerned that new or expanded weed infestations will go unchecked—as is the situation with current weed infestations in the BPA ROW.

4.1.1.3 Cumulative Impacts

"Filling or adverse modification of wetlands.... This could be offset through mitigation and restoration of degraded wetlands within the affected watersheds."

394-318 | Because there are no unacceptably degraded or filled wetlands, there are essentially no significant opportunities for wetland creation, restoration, or enhancement in the subbasins of the CRW.

4.1.3 Alternative Transmission Line Impacts

4.1.3.1 Alternative 1

Impacts—

"The 150-ft. wide cleared ROW would impact a total of 25 ac. of wetlands (Table 2). Wetlands surveyed within the Alternative 1 ROW consisted primarily of palustrine scrub-shrub and palustrine forested types. The majority of wetlands were low-gradient, depressional wetlands. Major streams and rivers associated with wetlands within the Alternative 1 ROW include the Raging River, Rock Creek, and Cedar River."

Clearing would cause a moderate-level impact to forested wetlands and their buffers. Wildlife habitat, flood flow and flood storage, and water quality functions could be degraded. Scrub-shrub and open water wetlands would experience moderate, low, or no impact assuming the wetlands could be avoided or spanned and that soils, hydrology, and vegetation were maintained."

394-319 | There is no site-specific information regarding wetland impacts in this section or those for the other alternatives, thus this impact evaluation is inadequate. Using definitions presented in the introduction to Section 4, clearing of forested wetlands would constitute a high—not a moderate—impact (impairing the ecological integrity of a wetland). These comments apply to the description of impacts for all alternatives. The DEIS and technical appendix should have a meaningful evaluation of potential impacts that is based on sufficient real information.

Mitigation—*Mitigation measures specific to the wetland resources along Alternative 1 would include: "Minimize road construction and strategically site towers to avoid wetlands 1-3 and 1-4 to minimize impacts to wetlands within the headwaters of Rock Creek."*

394-320 | Wetlands 1-1 and 1-2 are also in Rock Creek headwaters and impacts to these wetlands would need to be compensatorily mitigated. Potential clearing in riparian wetlands along the Cedar River would be a significant impact, but these wetlands were not identified. However, in text two paragraphs above this section this technical appendix states: *"Major streams and rivers associated with wetlands within the Alternative 1 ROW include the ...Cedar River."* The DEIS and its technical appendices need to present a complete and consistent description of the proposed action. Also, this section lacks mention of compensatory mitigation. The DEIS and technical appendix should contain a discussion of compensatory mitigation to which BPA would commit.

4.2 Operation and Maintenance Impacts

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394-313 | Please see response to Comment 394-303.

394-314 | Please see response to Comment 340-002.

394-315 | Please see response to Comment 340-002.

394-316 | Please see response to Comment 394-303.

394-317 | See response to Comment 382-017.

394-318 | Comment noted.

394-319 | See response to Comment 394-303.

394-320 | Please see response to Comment 340-002.

4.2.1 Impacts Common to All Action Alternatives

4.2.1.1 Impacts

"Moderate-level wetland impacts would also occur where the forest cover was removed and permanently maintained as scrub-shrub or emergent vegetation."

394-321 | This statement conflicts with previous statements. Conversion of forested to scrub-shrub or emergent wetlands constitutes a high wetland impact, according to definitions presented at beginning of Section 4.0.

Mitigation

394-322 | As King County requires of other public utilities, such as Puget Sound Energy, BPA should commit to compensatorily mitigating every tree removed from wetland and riparian habitats during operation and maintenance activities.

5.1.3 Section 404

"This project, with mitigation measures as stated, would meet the standards outlined by the CWA."

394-323 | This is an incorrect statement. Without compensatory mitigation "mitigation measures as stated" would not meet the standards currently used by the Army Corps of Engineers, or by King County, in mitigating for unavoidable wetland impacts. However, due to a lack of site-specific information and the subsequent inadequate impact analysis no firm conclusions can be obtained regarding where or how much wetland would be filled or otherwise impacted by any alternative. The DEIS and technical appendix should contain sufficient information about potentially impacted wetlands such that a meaningful impact analysis can be conducted, at which point these documents can then realistically evaluate the required compensatory mitigation and the project's ability to comply with federal, state, and local wetland regulations.

5.2 Other Standards and Guidelines

5.2.1 Cedar River Watershed Habitat Conservation Plan

"Specifically, the HCP allows timber harvest and road construction within wetlands and wetland buffers only in limited circumstances. For activities in wetlands and their buffers, the City of Seattle would consult with the state and federal agencies regarding measures to minimize and mitigate the impacts."

394-324 | These statements are wrong. The HCP does not allow timber harvest or road construction in wetlands. The City of Seattle would not be responsible for mitigating impacts to wetlands and their buffers due to construction of BPA's project, nor for any consultation or financial obligation necessary thereto.

394-321 | See response to Comment 394-303.

394-322 | Please see response to Comment 340-002.

394-323 | Your comment regarding mitigation is noted and will be addressed in the appropriate detail in the Mitigation Action Plan to be prepared for this project, and in association with permitting discussions with the appropriate federal, state, and local regulatory agencies. Please see responses to Comments 340-002 and 394-303.

394-324 | A revision is not required because though the HCP (April 2000) has committed to not harvest timber within aquatic and riparian ecosystem components, this does not prevent the City from conducting operations and activities associated with watershed management. The restriction alluded to by your comment only applies to the commitment not to harvest timber for "commercial purposes." (Cedar River Watershed HCP, April 2000: pages 4.2 6-7 and 4.2 45-46). BPA did not intend to imply that the City of Seattle would be responsible for any impacts created as a result of the proposed project.



**King County
Department of Development
and Environmental Services**
900 Oakesdale Avenue Southwest
Renton, WA 98055-1219

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-395</i>
RECEIPT DATE: SEP 05 2001

September 4, 2001

Communications
Bonneville Power Administration – KC-7
P.O. Box 12999
Portland, OR 97212

Re: Kangley – Echo Lake Transmission Line Project
KEC – 4

Dear Sir/Madam:

Thank you for the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS) for the proposed Kangley-Echo Lake Transmission Line Project. The comments that are enclosed focus on whether this proposed project is consistent with King County's Comprehensive Land Use Policies and zoning and related regulations affecting development within environmentally sensitive areas.

King County has developed its Comprehensive Plan land use policies pursuant to Article 11, Section 11 of the Washington State Constitution and the Washington State Growth Management Act (GMA), R.C.W. 36.70A. The King County Comprehensive Plan is the principle planning document used by King County for the orderly physical development of the county. Policies set forth in the County's Comprehensive Plan are implemented through County land use regulations including, but not limited to, the King County Zoning Code, KCC Title 21A (including limitations upon development within environmentally sensitive areas); Surface Water Management Code, KCC Title 9 (including provisions for the protection of surface and groundwater); Building and Construction Standards Code, KCC Title 16 (including general clearing and grading standards) and Shoreline Management Code, KCC Title 25 (including restrictions upon development within designated shorelines). Each of these land use regulations was likewise adopted pursuant to authority of Article 11, Section of the Washington State Constitution and the Washington State Growth Management Act.

The proposed transmission corridor crosses two general zone classifications within unincorporated King County. These are the Forest and Rural Residential Zones. Utility facilities are permitted uses within these zone classifications but only to the extent that

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these facilities comply with all applicable provisions of the zoning code, including the development standards for environmentally sensitive areas. The DEIS does not evaluate whether this project complies with these regulations but concludes on page 5-15 that by complying with the Endangered Species Act, Section 404 of the Clean Water Act, Coastal Zone Management Act, et. al., the project will comply with the substantive intent of these regulations. As noted in Section 5.11.2 of the DEIS, BPA will be providing information to the Department of Development and Environmental Services for later review to determine consistency with the County's Shoreline Master Program. This review covers a very small portion of the project route and there is no similar evaluation of how these other federal statutes meet or exceed the other applicable local regulations. In addition, the DEIS does not include the level of detailed technical analyses or design detail to determine this project's compliance with applicable King County Policies or adopted zoning or development regulations. For these reasons and others that are discussed in more detail in the attached comments, we do not agree with the DEIS conclusion relative to whether the proposed Kanasket-Echo Lake Transmission Project complies with applicable County policies or codes.

Thank you again for the opportunity to comment.

Sincerely,

Randy M. Sandin, Supervisor
Site Development Services Section

Wetlands, Streams, Wildlife, and Shorelines

1.0 Wetlands/Streams and Rivers

1.1 Wetlands

According to the DEIS, a total 10 wetlands, totaling 242 acre, were identified within the 500-ft transmission line study corridor under the proposed alternative. Most wetlands were low-gradient, depressional forested wetlands. Major streams and rivers associated with wetlands within the ROWS include the Raging River, Rock Creek, and Cedar River.

395-001

According to the Draft Environmental Impact Statement (DEIS), establishment of the cleared ROW would impact a total of 16 acres of wetland (please note that the wetland Appendix identified 25 acres of impact, under the proposed alternative-please clarify). The majority of wetlands that may be effected are associated with forested habitats that would be permanently altered, by the removal of trees, with construction of the transmission line. Impacts would include clearing shrubs, trees, and herbaceous vegetation from wetlands and wetland buffers. Direct and indirect impacts that could occur within or outside of the cleared ROW include, vegetation alteration, water quality degradation, sedimentation, introduction of invasive species, wildlife impacts, and changes in wetland hydrology. Permanent impacts on wetlands, buffers, and their functions and values may occur from fill associated with road access or widening for tower construction. New access roads would be sited to avoid wetland impacts where possible, however, road construction and use could carry sediment into wetlands, affecting water quality and biological productivity. Expansion of the substation is expected to impact less than 1/10 acre of wetland. Operation and maintenance of the ROW (vegetation removal) would include periodic impacts on wetlands and their buffers.

The following Comprehensive Plan policies apply to the siting of facilities in and around wetlands:

395-002

Wetlands are valuable natural resources in King County. They include shallow or deep marshes, bogs, ponds, wet meadows, forested and scrub-shrub communities and other lands supporting a prevalence of vegetation adapted to saturated soils. Many of the larger wetlands in King County are mapped in the County's Sensitive Areas Map Folio, and their vegetation, hydrology and wildlife are briefly described in the King County Wetlands Inventory.

E- 130 King County shall use as minimum standards, the Washington State Wetlands Identification and Delineation Manual, 1997 or its successor which is adopted by the King County Council and is the scientifically accepted replacement methodology based on better technical criteria and field indicators.

Wetlands are productive biological systems, providing habitat for fish and wildlife. They may serve as outdoor classrooms for scientific study. Some are used for hiking, hunting,

395-001 At the time the wetland technical study report was prepared, the amount of wetlands was estimated to be 25 acres within the proposed right-of-way. Further refinement of the amount of wetland impacts was made for the DEIS which stated 16 acres of wetland impact. Additional refinement of the level of wetland impact contained in the SDEIS is 14 acres. For more information please see the revised Appendix D.

395-002 BPA recognizes the value that wetlands contribute to the environment, and agrees with King County that these areas are productive biological systems, providing habitat for fish and wildlife. BPA also recognizes that King County allows alteration of wetlands for utility development (King County Comprehensive Plan Policy E-139), as included in the comments provided by King County, provided that all wetland functions are evaluated, the least harmful and reasonable alternatives are pursued, affected significant functions are appropriately mitigated and mitigation sites are provided with monitoring. BPA is committed to complying with this King County Comprehensive Plan policy, as well as other applicable King County policies.

BPA has selected Alternative 1 as its Preferred Alternative. It parallels an existing high voltage transmission line and takes advantage of the existing clearing that has already taken place, the existing access road system, avoids a separate crossing of the Cedar River downstream of the existing crossing, and also avoids paralleling the Cedar River as Alternatives 4A and 3 would do. Furthermore, BPA has sited its substation expansion, transmission towers and access roads in uplands to avoid filling any wetlands.

BPA proposes to provide compensatory mitigation to satisfy King County regulations to mitigate for the 14 acres of forested wetlands that would be converted to scrub/shrub wetlands within the proposed transmission line right-of-way. See response to Comment 340-002.

and fishing. Wetlands also store flood waters and control runoff, thereby reducing flooding, downstream erosion and other damage. Further, wetlands protect water quality by trapping sediments and absorbing pollutants. They discharge ground water, making it available to plants and animals. Wetlands store peak flows and discharge to streams in dry periods, thus enabling fish and other riparian animal populations to survive. These wetland functions need consideration from a watershed perspective.

- E- 132 **King County's overall goal for the protection of wetlands is no net loss of wetland functions within each drainage basin. Acquisition, enhancement, regulations, and incentive programs shall be used independently or in combination with one another to protect and enhance wetland functions.**
- E- 133 **Development adjacent to wetlands shall be sited such that wetland functions are protected, an adequate buffer around the wetlands is provided, and significant adverse impacts to wetlands are prevented.**

The functions and values of a wetland will change as land use surrounding the wetland changes. Fragmentation of habitat is considered the greatest threat to native biodiversity. Protecting native species biodiversity depends upon maintaining biological linkages and preventing fragmentation of wetland habitats. Small wetlands strategically located between other wetlands may provide important biological links between other, higher quality wetlands. Wetlands adjacent to habitat networks also are especially critical to wildlife functions and should receive special consideration in planning land use.

- E- 134 **Areas of native vegetation that connect wetland systems should be protected. Whenever effective, incentive programs such as buffer averaging, density credit transfers, or appropriate non-regulatory mechanisms shall be used.**
- E- 135 **The unique hydrologic cycles, soil and water chemistries, and vegetation communities of bogs and fens shall be protected through the use of incentives, acquisition, Best Management Practices, and implementation of the King County Surface Water Design Manual to control and/or treat stormwater within the wetland watershed.**
- E- 138 **Enhancement or restoration of degraded wetlands may be allowed to maintain or improve wetland functions provided that all wetland functions are evaluated in a wetland management plan, and adequate monitoring, code enforcement and evaluation is provided and assured by responsible parties. Restoration or enhancement must result in a net improvement to the functions of the wetland system. Technical assistance to small property owners should be considered.**
- E- 139 **Alterations to wetlands may be allowed to:**
a. Accomplish a public agency or utility development;
b. Provide necessary utility, stormwater tightline and road crossings; or
c. Avoid a denial of all reasonable use of the property, provided all wetland functions are evaluated, the least harmful and reasonable alternatives are pursued, affected significant functions are appropriately mitigated, and mitigation sites are provided with monitoring.

395-003

395-004

395-003 BPA understands that King County's goal is "no net loss of wetlands." BPA will work with King County to develop acceptable mitigation that meets both agencies' needs.

BPA would use best management practices when constructing its facilities so that wetland functions are protected, buffers are protected to the extent practicable and significant adverse impacts to wetlands are prevented.

395-004 BPA understands that the King County Code provides for the alteration to wetlands to accomplish a public agency or utility development such as the proposed project, provided that all wetland functions are evaluated, the least harmful and reasonable alternatives are pursued, the affected significant functions are appropriately mitigated and mitigation sites are provided with monitoring.

BPA has prepared a wetland report that it has submitted to the King County Department of Development and Environmental Services in compliance with King County requirements, and also intends to provide compensatory mitigation to mitigate for the alteration of forested wetlands to scrub/shrub wetlands that would be necessary to construct the project.

Please see the revised Appendix D and the Wetland Delineation Report (sent to the County under separate cover).

395-005 BPA understands that when adverse impacts cannot be avoided, such as hand clearing of tall-growing vegetation in forested wetlands in the proposed transmission line right-of-way, compensatory mitigation may be allowed. See response to Comments 395-003 and 395-002.

395-006 BPA understands that King County zoning guidelines prohibit development from occurring within wetlands except where the minimum requirements are satisfied, and when there are no

395-005

When adverse impacts cannot be avoided, compensatory mitigation may be allowed. This means the replacement of project-induced losses of wetland functions and values will be permitted through wetland creation, restoration or enhancement.

- E- 141 **Mitigation sites should replace or augment the functions to be lost as a result of the project proposal. Wetland mitigation proposals should be approved if they would result in improved overall wetland functions within a drainage basin. All wetland functions should be considered. Mitigation sites should be located strategically to alleviate habitat fragmentation, and avoid impacts to and prevent loss of farmable land within Agricultural Production Districts.**
- E- 142 **Mitigation projects should contribute to an existing wetland system or restore an area that was historically a wetland. The goal for these mitigation projects is no net loss of wetland functions per drainage basin.**
- E- 143 **Land used for wetland mitigation should be preserved in perpetuity. Monitoring and maintenance in conformance with King County standards should be provided by the project proponent until the success of the site is established.**

The foregoing Comprehensive Plan provisions for evaluating proposed uses within wetlands are implemented by pertinent zoning code provisions paraphrased below. King County zoning guidelines prohibit development from occurring within wetland except where these minimum requirements area satisfied.

KCC 21A.24.320-Wetland Development standards defined.

KCC 21A.24.330- (B), (E), and (N)
(B) –Special study required (see KCC 21A.24.100, 110, and 120)

(E)- Utilities may be allowed in wetland buffers if no practical alternative location is available and the utility corridor meets any additional requirements set forth in administrative rules.

(N)-Wetland road crossings

395-006

KCC 21A.24.130 Mitigation required: mitigation, maintenance, monitoring, and contingency.

KCC 21A.06.750 Mitigation defined. In descending order of preference, avoidance, minimization, rectification, reduction or elimination over time, compensation by replacing, enhancement, etc., and monitoring.

KCC 21A.24.340 (C) Replacement is required when a wetland or buffer is altered. Restoration of wetland shall be met by replacement.

direct impacts to jurisdictional wetlands as a result of the proposed project. BPA has sited all of the proposed facilities, e.g., transmission towers, access/spur roads and the substation expansion, on uplands.

BPA intends to satisfy the minimum standards as identified in King County’s comments to the DEIS. To wit:

KCC 21A.24.320 Wetlands — Development Standards. BPA recognizes that all wetlands within King County are protected by buffers from 25 feet to 100 feet, and that the buffer widths are dependent on the classification of their associated wetland. BPA also understands that buffer widths can be increased by King County when necessary to protect wetlands.

KCC 21A.24.330 (B) — BPA understands that King County allows alterations to wetlands and wetland buffers pursuant to K.C.C 21A.24.075 or if the proposed development will (a) protect, restore or enhance the wildlife habitat, natural drainage or other valuable functions of the wetland resulting in a net improvement to the functions of the wetland system; (b) develop a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist; (c) perform the restoration or enhancement under the direction of a qualified biologist; and (d) will otherwise be consistent with the purposes of this chapter. BPA also understands that to establish baseline conditions, detailed studies “may be required,” such special studies, should they be required, shall include specific recommendations for mitigation which may be required as a condition of any development proposal (approval); and that these recommendations (if made) may include specific design and construction techniques.

In complying with the King County Code, BPA has prepared a wetland delineation report that identifies the direct and indirect impacts to the sensitive areas, and how they can be reduced. Additionally, BPA agrees to provide compensatory mitigation to offset the unavoidable impacts to the sensitive areas as a result of the proposed project.

While BPA has successfully cited all of its proposed facilities in uplands, some buffer areas would be affected. BPA

KCC 21A.24.340 (D) Enhancement may be allowed, but the wetland biologic and hydrologic functions shall be improved.

KCC 21A.24.340(F)- Off site mitigation allowed if within the same sub-basin, and greater hydrologic and biologic functions are achieved.

395-007

KCC 21A.24.070- Exceptions to the wetlands standards are allowed if no practical alternative exists with less impact on the sensitive area and the proposal minimizes impacts on sensitive areas.

1.2 Streams/Rivers

395-008

The DEIS stated that the preferred transmission line alternative would cross nine fish-bearing streams and an unknown number of non-fish-bearing streams. Impacts on stream resources from the proposed action would include the clearing of 12 acres within 100 feet of potentially fish-bearing streams and 33 acres within 300 feet of potentially fish bearing streams. Approximately 2,900 feet of stream would be within the cleared ROW. Clearing within 100 feet of the stream could reduce riparian shading and bank reinforcement by roots, and increase fine litter contributions to the stream. Clearing within 300 feet of the stream could affect LWD recruitment to the stream and stream microclimate. It is also possible that during construction, surface water runoff containing sediment, fuel spills, herbicide runoff and other contaminants could impact streams.

395-009

During the construction of the transmission line, the DEIS identifies that the BPA may need to install some culverts to provide or upgrade stream crossings for access roads. Improper culvert installation may impact stream hydrology, increase sediment delivery to streams, increase peak flows, and/or create a fish passage barrier. Road construction and road use could cause sediment delivery to streams.

395-010

Although specific locations have not been determined yet, it is stated that the BPA would need to blast bedrock to install some tower footings. Detonating explosives in or adjacent to fish habitat could cause disturbance, injury, or death to fish and destruction or alteration of their habitat.

Operation and maintenance activities in of the ROW (vegetation removal) would include periodic impacts on streams and riparian areas. It is stated that the BPA has prepared a programmatic EIS for its vegetation management program associated with transmission lines, roads, and related facilities.

395-011

Comprehensive Plan policies apply to the siting of facilities in and around streams are identified below and in the Comprehensive Plan policies identified Under Fish and Wildlife and Shoreline sections in this letter.

Our use and modification of water resources and the surrounding terrestrial environment affects how the hydrologic cycle functions and can cause unintended detrimental impacts such as flooding, erosion, degradation of water quality, loss of fish and wildlife habitat,

understands that this section of the King County Code allows for utilities such as transmission lines to be located in wetland buffer areas "if no practical alternative location is available and the utility corridor meets the additional requirements set forth in the administrative rules." The rules say that utilities may be allowed if: (1) King County determines that no practical alternative location is available, and (2) the utility corridor meets any additional requirements set forth in the administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance.

BPA has undertaken an environmental review of the Proposed Action and several alternatives, including the No Action Alternative, under the National Environmental Policy Act of 1969, as amended. BPA has reviewed a range of alternatives that included alternatives that circumvented the Cedar River Municipal Watershed as well as those that crossed the Watershed and non-transmission alternatives. Alternative 1 was selected as the proposed action since it would create the least impacts to the human environment, which includes both the social environment as well as the natural environment. It avoided a second separate crossing of the Cedar River, which is protected under the Washington State Shoreline Management Act; would avoid clearing riparian habitat along the Cedar River; was the least likely to affect cultural resources; would require the least amount of clearing in that it would be located immediately adjacent to BPA's existing 500-kV transmission line, and would also require the least amount of new access/spur roads. Additionally, the alternative was the one that the King County Comprehensive Plan (ET-203) suggests should be looked at first when attempting to site additional utility lines, and that is in existing utility corridors. The Proposed Action was the shortest line under review, and therefore would have the least line losses. It also is the least costly to construct, including material, land and mitigation costs.

Two alternatives, Alternatives 3 and C, would likely impact fewer wetlands than the Proposed Action. Implementation of these alternatives, however, would create many other impacts to other environmental resources. Both alternatives would require more clearing and more access roads and have a higher risk of impacting cultural resources and scenic quality. Alternative 3

and loss of archeological and traditional cultural resources that depend upon but do not damage natural resources. In order to minimize adverse impacts on the water resources of King County and ensure our continued ability to receive the benefits they provide we need to promote responsible land and water resource planning and use.

E- 116 King County shall use incentives, regulations and programs to manage its water resources (Puget Sound, rivers, streams, lakes, freshwater and marine wetlands and ground water) and to protect and enhance their multiple beneficial uses-including fish and wildlife habitat, flood and erosion control, water quality control and sediment transport, water supply, energy production, transportation, recreational opportunities and scenic beauty. Use of water resources for one purpose should, to the fullest extent practicable, preserve opportunities for other uses.

395-012

E- 117 Development shall support continued ecological and hydrologic functioning of water resources and should not have a significant adverse impact on water quality or water quantity, or sediment transport and should maintain base flows, natural water level fluctuations, ground water recharge in Critical Aquifer Recharge Areas and fish and wildlife habitat.

395-013

E- 126 Stormwater runoff shall be managed through a variety of methods, with the goal of limiting impacts to aquatic resources, protecting and enhancing the viability of agricultural lands and promoting groundwater recharge. Methods of stormwater management shall include temporary erosion and sediment control, flow control facilities, water quality facilities as required by the Surface Water Design Manual, and Best Management Practices as described in the Stormwater Pollution Control Manual. Runoff caused by development shall be managed to prevent adverse impacts to water resources and farmable lands. Regulations shall be developed for lands outside of the Urban Areas that favor non-structural stormwater control measures when feasible including: vegetation retention and management; seasonal clearing limits; limits on impervious surface; and limits on soil disturbance.

395-014

E- 128 River and stream channels, stream outlets, headwater areas, and riparian corridors should be preserved, protected and enhanced for their hydraulic, hydrologic, ecological and aesthetic functions, including their functions in providing woody debris sources to salmonid-bearing streams.

The foregoing King County Comprehensive Plan stream policies are implemented by the zoning code provisions paraphrased below. King county zoning precludes development from occurring within rivers, streams and associated buffers unless these minimum requirements area satisfied.

KCC 21A.24.360-Zoning Code (SAO) Development Standards for Streams.

KCC 2A.24.370: (A), (D), (G), and (J)

(A)- Special study required (see KCC 21A.24.100; 110; and 120.

395-015

(D)- Utilities allowed in stream buffers if no practical alternatives exist and provisions of KCC 21A.24.220 are met.

would require a separate right-of-way through the Watershed and a separate crossing of the Cedar River at a point where the river would have shorter banks, requiring riparian vegetation to be cleared. Alternative C would impact a large number of residences outside of the Watershed and wells on private lands. These impacts seriously handicap these alternatives when compared to the Proposed Action.

Since BPA is prepared to meet any additional requirements set forth in administrative rules including requirements for installation, replacement of vegetation and maintenance, so long as these requirements would allow BPA to meet NESC (National Electric Safety Code) requirements and its own maintenance standards for safe operation and maintenance of the line, BPA believes that it complies with the King County Code.

BPA understands that Section KCC 21A.24.330 (N) of the King County Code allows constructing roads in wetlands as long as certain conditions are met.

Since BPA has sited all of its facilities in uplands, no roads would be constructed in wetlands.

All jurisdictional wetlands would be avoided as a result of BPA's proposal to construct the transmission line using a helicopter instead of a boom as much as possible. Doing so eliminates the need to construct 16-foot wide access roads to reach the proposed tower sites and the need to fill wetland areas.

BPA has submitted a wetlands report to King County that addressed the impacts that its facilities would have on the storage capacities of the wetlands, if any, and the degree that the proposed project would impact the hydrology of these sensitive areas as well. The agency agrees to mitigate the effects of these impacts on these sensitive areas, as required by the King County Code.

BPA understands that (as determined by King County) mitigation, maintenance and monitoring measures shall be in place to protect sensitive areas and (their) buffers from alterations occurring on the development proposal site.

(G)- Stream crossings

(J) Stream channels may be stabilized if stream movement threatens an existing structure, does not impact the floodplain, and consistent with the Guidelines for Stream Bank Stabilization.

KCC 21A.24.130- Mitigation required.

KCC 21A.06.750-Mitigation defined.

KCC 21A.24.380(D) Replacement or enhancement is required when a stream or buffer is altered. Replacement or enhancement shall result in no net loss of stream functions and result in no impact to streams.

395-016

KCC 21A.24.380 (F)- Mitigation shall be on site and in-kind unless on site mitigation is not possible, mitigation occurs within the same sub-basin and greater biologic and hydrologic functions are achieved.

395-017

KCC 21A.24.070- Exceptions to the stream standards are allowed if no practical alternative exists with less impact on the sensitive area and the proposal minimizes impacts on sensitive areas.

1.3 Proposed projects consistency with King County’s land use land use plans and zoning regulations for wetlands and streams/rivers

395-018

Upon review of the DEIS, King County has determined that the proposed project is not consistent with King County’s land use plans and zoning regulations affecting streams and wetlands. Provisions are available in King County’s zoning regulations to deviate from certain of its sensitive area development standards if an applicant can demonstrate that through an alternative evaluation there are no practical project alternatives or locations (21A-24-005 D.) to the proposal that would minimize and mitigate impacts on sensitive areas (Public Rules 21A-24-025). There are practical alternatives and mitigation that have not been evaluated in the DEIS that are available and that may preclude use of such and exemption or which would further reduce project impacts to sensitive areas to the point that an exemption could be granted.

The alternative analysis in the DEIS does not demonstrate that there are no practical alternatives to the proposal that would minimize impacts on sensitive areas. The development of alternative appears to be primarily driven by cost, residence and subdivision avoidance, and WSCC reliability criteria. An alternatives evaluation will need to be performed that demonstrates avoidance, or where avoidance is not feasible, minimization of impacts to stream and wetland resources.

Section 4.9.2.4 of the DDES identifies standard mitigation measures to minimize wetland impacts and Section 4.5.21 and Section 4.6.2.11 of the DDES identifies standard mitigation measures to minimize impacts on streams and associated fish resources.

BPA will be complying with EPA’s National Pollutant Discharge Elimination System in developing a storm water pollution permit and filing the permit with EPA prior to the onset of construction activities. BPA also will be initiating water turbidity monitoring before, during and following its construction activities to ensure that no adverse impacts would be created to sensitive areas and their buffers, including Seattle Public Utilities drinking water.

King County requires that mitigation be offered in the following order of preference: Avoidance, minimization, rectification, reduction or elimination over time, compensation by replacing, enhancement, etc., and monitoring.

BPA has successfully avoided the need to fill any wetlands. However, some forested wetlands within the proposed right-of-way would need to be cleared of tall-growing vegetation. BPA would minimize this impact by removing that vegetation that would be a hazard to the safe construction, operation or maintenance of the line. Additionally, BPA would work with King County and anticipates that it can provide the appropriate level of compensatory mitigation to satisfy King County requirements.

Section KCC 21A.24.340 of the King County Code states that restoration shall be required when a wetland or its buffer is altered in violation of law or without any specific permission or approval by King County. BPA understands this section of the King County Code, and does not anticipate any activities that would be found to be a violation of law, or that would be found to be out of compliance with King County regulations.

Section KCC 21A. 24.340 of the King County Code states that replacement shall be required when a buffer is altered pursuant to an approved development proposal or a wetland is used for a regional flow facility or other approved use. Requirements for the restoration of wetlands may be met by replacement wetlands.

BPA intends to avoid all wetland and stream buffers where it can (avoidance) and minimize any disturbance where it cannot (minimization). Where impacts cannot be avoided, BPA will work with the County to develop acceptable mitigation that meets both agencies’ needs.

- 395-019 Although these mitigation measures do identify measure to minimize impacts on stream and wetland resources, they are not comprehensive and do not identify specific steps that will be taken to avoid, reduce, or mitigate impacts on sensitive areas. Per King County zoning codes KCC 21A.06.750 and the Public Rules 21A-24.031, the proposed project must demonstrate all impacts on streams and associated buffers are avoided or reduced through mitigation. The following mitigation actions are listed in descending order of preference: 1) avoiding the impact by not taking a certain action, 2) minimizing the impact by limiting the degree or magnitude of the action by using appropriate technology or by taking affirmative steps to avoid or reduce the impact, 3) rectifying the impact by repairing, rehabilitating or restoring the affected sensitive area or buffer, 4) reducing or eliminating the impact over time by preservation or maintenance operations during the life of the development proposal, 5) compensating for the impact by replacing, enhancing or providing substitute sensitive areas and environments, and 6) monitoring the impact and taking appropriate corrective measures. Mitigation should include site specific analysis of each sensitive area that would be affected by the proposed project. Specific project siting alternatives should then be developed to avoid or minimize impacts on sensitive areas (specifically, avoiding all impacts on Class 1 and 2 wetlands and streams). This should include identifying all sensitive areas where impacts could be avoided or reduced through alternative siting methods such as using existing topography to span sensitive areas that would alleviate the need to remove existing vegetation. The analysis should also include identifying locations along the proposed ROW where the proposed utility corridor or roads and other associated facilities could be shifted to avoid impacting sensitive areas. A sensitive area clearing plan should also be prepared as part of the design of the project to minimize vegetation impacts on wetlands, streams, and associated buffers. The plan should identify and evaluate specific sensitive areas that could not be avoided through the siting alternatives evaluation, and determine the permissible height of existing vegetation that could remain at these locations.
- 395-020
- 395-021 As stated above, enhancement, restoration, or creation will be required for all unavoidable wetland, stream, and buffer impacts. The DDIS did not identify sufficient mitigation measure to rectify sensitive area impacts by repairing, rehabilitating or restoring the affected sensitive areas. The mitigation should include compensating for the impacts by creating substitute sensitive areas or enhancing sensitive areas. This will include mitigation for all temporary construction-related sensitive area, and permanent sensitive area impacts, such as modifying forested wetlands to other vegetation types, will require replacement of the functions of those sensitive areas through enhancement, restoration, or creation of altered sensitive area resources. Monitoring must also be competed and remedial actions should be identified to assure enhancement, restoration, or creation mitigation measures are successful. Mitigation sites should be on land that is owned either by the BPA, King County, or other ownership acceptable to King County, and shall be permanently protected from future development or alteration.
- The following bulleted items identify additional wetland and stream zoning code non-consistency issues that should be addressed within the final EIS.
- BPA understands Section KCC 21A 24.340 (D) of the King County Code. Enhancement may be allowed, but the wetland biologic and or hydrologic functions shall be improved.
- KCC 21A.24340 (F)** — Replacement or enhancement off site may be allowed if the applicant demonstrates to the satisfaction of King County that the off-site location is in the same drainage subbasin as the affected wetland and that greater biologic and hydrologic functions would be achieved. BPA understands this section of the King County Code, and intends to provide compensatory mitigation.
- 395-007 **KCC 21A.24.070** — Exceptions to the wetland standards are allowed if no practical alternative exists with less impact on the sensitive area and the proposal minimizes impacts on sensitive areas.
- BPA understands this section of the King County Code. As mentioned above, BPA believes there is no practical alternative to the Proposed Action with fewer environmental impacts, and the Proposed Action is designed to minimize impacts to the sensitive areas that could not be avoided.
- 395-008 BPA did identify these impacts in the DEIS and also identified mitigation measures that would reduce these impacts. Please see Section 4.6.2.11 of the DEIS and Section 4.6.2.10 of the SDEIS.
- 395-009 Please see response to Comments 394-084, 394-188 and 394-132.
- 395-010 Potential blasting impacts are detailed in Section 4.1.1.1 of the Fisheries Technical Report (Appendix A). That discussion also states that no in-water blasting would occur, and that blasting within 400 feet of fish-bearing streams would not occur when sensitive life history stages of fish are present in the blasting area.
- 395-011 Comment noted. BPA understands that King County precludes development from occurring within rivers, streams and associated buffer areas unless minimum requirements are satisfied. BPA has sited its proposed facilities to avoid all of these sensitive areas, and agrees to provide compensatory mitigation to offset impacts where they could not be avoided.

Wetlands

- 395-022 • All wetland sites within or outside of the proposed ROW that may be impacted by project activities would need to be delineated using methodology outlined Ecology's State of Washington Wetland Identification and Delineation Manual (1997).
- 395-023 • All wetlands would need to be classified per 21A.06.1415 (A-C).
- 395-024 • Per the KCC 21A.24.320, all class 1 wetlands shall have a 100-foot buffer, Class 2 wetlands shall have 50-foot buffers, and Class 3 shall have 25-foot buffers. Buildings and other structures shall be setback 15-feet from the wetland buffer (21A.24.200).
- 395-025 • Sensitive area buffers are mandated for the purpose of protecting wetlands. Buffers of native vegetation help wetlands to maintain both hydrological and biological functions and values. These include storm water conveyance and food chain support, as well as flood prevention and salmon production. In order for buffers to perform these duties they must remain in an undisturbed condition as a "setback area" in which native plants are allowed to grow; non-native species are not allowed to be introduced into this area (KCC21A.24.330).
- 395-026 • Utilities and/or removal of vegetation for a proposed utility corridor may be allowed within established wetland buffers only if the development would protect, restore or enhance the wildlife habitat, natural drainage or other valuable functions of the wetland resulting in a net improvement to the functions of the wetland system (21A.24.330 E).
- 395-027 • The filling of non-isolated wetlands for construction of structures is not permitted under King County code. Alteration of isolated wetlands (21A.06.1410) may be permitted under some circumstances (21A.24.330 K).
- 395-028 • Alteration to wetlands and wetland buffers from road crossings must be mitigated (21A.24.330 (A.2) and N). Additionally, crossings must not change the overall wetland hydrology, must minimize wetland impacts, and must be constructed during summer low water periods. Alterations of wetlands shall be replaced or enhanced on the site or within the same drainage basin using the following formulas: Class 1 and 2 wetlands on a 2:1 basis and class 3 wetlands on a 1:1 basis with equivalent or greater biologic functions including, but not limited to, habitat functions and with equivalent hydrologic functions including, but not limited to, storage capacity (21A.24.340 C., D., and E). Replacement or enhancement off the

395-012 Chapter 4 and Appendices A, C, and D of the SDEIS describe the potential effects and mitigation for the Proposed Action regarding water quality, fish habitat, and wildlife habitat.

See response to Comment 394-044 for a reference to response to comments with additional information on impacts to water quality, fisheries, and wetlands.

See response to Comments 394-062, 394-088, 394-096, 394-098, 394-100, 394-101, 394-102, 394-227, 394-236, 394-237, 394-240, 394-241, 394-242, 394-247, and 395-006 for additional information on impacts to wildlife.

395-013 The BPA, as specified under the EPA rules pertaining to stormwater discharges into surface water bodies (40 CFR 122-124), shall obtain an National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including clearing, grading, and excavation, that disturbs one or more acres of land. Under Section 402 of the Clean Water Act, federal facilities (or projects) are subject to these permitting requirements; administration of this program has been delegated to the state, however, for federal projects, EPA administers this program. BPA, as a federal agency, will obtain a general NPDES permit from EPA Region 10. BPA will prepare a project specific Storm Water Pollution Prevention (SWPP) Plan. This plan helps ensure that erosion control measures would be implemented and maintained during construction. It also addresses best management practices for stabilization, stormwater management, and other controls. Additionally the SWPP plan contains a site-specific Spill Prevention and Control (SPC) Plan that covers the project scope of work (including equipment, materials, and activities).

395-014 Comment noted. See response to Comment 395-011.

395-015, -016 and -017 ***KCC 21A.24.360 Streams: Development Standards*** — BPA recognizes that King County has adopted development standards for sites near streams, and that the streams have buffers depending on how they are classified. Class 1 streams have 100-foot buffers, Class 2 streams containing salmonids also have 100-foot buffers, Class 2 streams (without salmonids) have 50-foot buffers, and Class 3 streams have 25-

395-028 | site may be allowed if the applicant demonstrates that the off-site location is in the same drainage sub-basin as the original wetland and that greater biologic and hydrologic functions will be achieved.

395-029 | • The use of herbicides in wetlands and buffers will not permitted (KCC 21A.24.320 D).

Streams

395-030 | • Site specific analysis of all proposed streams to be crossed would need to be performed to identify and evaluate streams for the presence of fish (KCC 21A.24.100; 110; and 120) and classify the streams. As noted within the DEIS Fisheries Appendix, the DEIS relied upon remote methods to identify potential fish-bearing streams.

395-031 | • Per the KCC21A.24.360, Class 1 streams and Class 2 stream used by salmonids shall have 100-foot buffers. Non-fish bearing Class 2 streams shall have a 50-foot buffer and Class 3 streams (ephemeral) shall have a 25-foot buffer. Alteration, such as vegetation clearing, is typically not permitted within stream buffers.

395-032 | • Sensitive area buffers are mandated for the purpose of protecting streams and rivers. Buffers must remain in an undisturbed condition as a “setback area” in which native plants are allowed to grow: non-native species are not allowed to be introduced into this area (KCC21A.24.330).

395-033 | • Utilities may be allowed in stream buffers if no practical alternative is available and the utility corridor meets any additional requirements set forth in administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance (21A.24.330 E.).

395-034 | • Crossings of streams and encroachment on the otherwise required stream buffer may be allowed if all crossings use bridges or other construction techniques which do not disturb the stream bed or bank, except that bottomless culverts or other appropriate methods demonstrated to provide fisheries protection may be used for Class 2 or 3 streams if the applicant demonstrates that such methods and their implementation will pose no harm to the stream or inhibit migration of fish (21A.24.370 G). All crossings must be constructed during the summer low flow and be timed to avoid stream disturbance during periods when use is critical to salmonids. Crossings can not occur over salmonid spawning areas unless King County determines that no other possible crossing site exists. Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark. Crossings do not diminish the flood-carrying capacity of the stream.

foot buffers. BPA also understands that King County can increase buffer widths when necessary to protect streams.

KCC A.24.370 Streams: Permitted Alterations — (A) Alterations may only be permitted if based on a special study see KCC 21A.24.100; 110; and 120.

BPA has sited its proposed transmission facilities to avoid sensitive areas like streams and wetlands and their associated buffer areas. While all streams would be spanned, tall-growing vegetation would likely need to be removed in buffer areas to comply with the National Electric Safety Code.

KCC 2A.24.370 D — This section of the King County Code allows utilities to be located within stream buffers if:

1. No practical alternative exists; and
2. The utility corridor meets any additional requirements set forth in the administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance.

BPA is undertaking this environmental review to determine the best alternative to meet the purpose and need of the proposed project. The Proposed Action was selected as the preferred alternative because it meets the project’s purpose and need, creates the least environmental impact, is technically superior to the other alternatives and has the least cost. The Proposed Action would parallel an existing transmission line, therefore taking advantage of an existing access road system, minimize the amount of clearing that would be required (because of the adjacent transmission line right-of-way), require the least amount of new conductor, and avoid a second separate crossing of the Cedar River.

With respect to meeting the additional requirements set forth in the administrative rules, BPA could not comment without knowing what these additional “requirements” would be. In building, operating and maintaining its high voltage system, BPA must conform to the National Electric Safety Code to construct, operate and maintain its facilities in a safe and reliable manner.

395-035

- The use of herbicides in stream buffers will not permitted (KCC 21A.24.360 D).

2.0 Fish and Wildlife

A number of wildlife species, including invertebrates, were identified as potentially occurring within the project area. Species that are federally-listed as threatened or endangered; federal species of concern; and Washington State-listed threatened, endangered, sensitive or monitor species with the potential to occur on the west-side of the Cascade Mountains were selected for the BPAs analysis. Species were sorted by their primary habitat associations, defined as forest communities, aquatic communities, riparian communities, early seral communities, and special or unique habitats.

395-036

Two wildlife habitat corridors designated as wildlife Network in the King County Comprehensive Plan occur within the project area. One of the wildlife corridors follows the Cedar River and another traverses the project area to the north of the river. Two wildlife corridors converge west of Rattlesnake Lake. Both corridors would be crossed by the project alternatives.

395-037

Impacts on wildlife species associated with the preferred alternative include physical loss of habitat, or disturbance of wildlife from the construction activities or ongoing facility use and maintenance. Temporary construction impacts would be associated with noise and human presence.

395-038

The proposed action could potentially impact three federally listed salmon species, the Chinook salmon, bull trout, and Coho salmon. Bull trout and Chinook salmon have not been recorded to use streams in the project area of any of the proposed alternative, however, all stream accessible to anadromous fish in the project area are regarded by the USFWS and NMFS as having potential to support Chinook salmon and bull trout. Chinook salmon have been recorded in the Raging River less than one mile downstream of the Segment D crossing, and their apparent absence in the project area may only be due to inadequate surveying. The Cedar River contains suitable Chinook salmon spawning habitat and such use is expected to occur after the Landsburg Dam fish ladder is completed. Reduced LWD recruitment potential and impacts on stream thermal regime were identified to be the primary issues of concern.

The following Comprehensive Plan policies and those identified under streams/rivers, Wetlands, and the Shoreline section of this letter apply to the siting of facilities in sensitive fish and wildlife species:

It is King County's goal to conserve fish and wildlife resources in the County and to maintain countywide biodiversity. This goal may be achieved through implementation of several broad policy directions that form an integrated vision for the future. Each of the pieces is necessary for the whole to be successful. The policy objectives are to 1) identify

KCC 2A.24.370 G — Stream crossings may be allowed and may encroach on the otherwise required stream buffer if:

1. All crossings use bridges or other construction techniques which do not disturb the stream bed or bank, except that bottomless culverts or other appropriate methods to provide fisheries protection may be used for class 2 or 3 streams if the applicant demonstrates that such methods and their implementation will pose no harm to the stream or inhibit migration of fish;
2. All crossings are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids;
3. Crossings do not occur over salmonids spawning areas unless King County determines that no other possible crossing site exists;
4. Bridge piers or abutments are not placed within FEMA floodway or the ordinary high watermark;
5. Crossings do not diminish the flood-carrying capacity of the stream;
6. Underground utility crossings are laterally drilled and located at a depth of four feet below the maximum depth of scour for the base flood predicted by a civil engineer licensed by the State of Washington; and
7. Crossings are minimized and serve multiple purposes and properties whenever possible.

BPA understands these conditions. No new stream crossings are proposed. BPA would use its existing access/spur road system to cross any streams associated with the proposed project.

KCC 2A.24.370 J — A stream channel may be stabilized if: (1) Movement of the stream channel threatens existing residential or commercial structures, public facilities or improvements, unique natural resources or the only existing access to property; and (2) the stabilization is done in compliance with the requirements of the King County Code 21A.24.230 through 21A.24.270 and administrative rules promulgated pursuant to this chapter.

and protect critical fish and wildlife habitat conservation areas, 2) link those critical habitat areas and other protected lands through a network system, and 3) integrate fish and wildlife habitat and conservation goals into new and existing developments. Conservation of biodiversity is necessary if wildlife benefits currently enjoyed by residents of the County are to be enjoyed by future generations.

- E- 165 The County shall strive to maintain the existing diversity of species and habitats in the County. The County should maximize wildlife diversity in the Rural Area.**
- E- 166 Fish and wildlife should be maintained through conservation and enhancement of terrestrial, air, and aquatic habitats.**
- E- 167 Habitats for species which have been identified as endangered, threatened, or sensitive by the state or federal government shall not be reduced and should be preserved. In the Rural Area and Natural Resource Lands, habitats for candidate species identified by the county, as well as species identified as endangered, threatened, or sensitive by the state or federal government shall not be reduced and should be preserved.**

The Growth Management Act requires jurisdictions to designate Fish and Wildlife Habitat Conservation Areas for protection. The Washington Administrative Code (WAC) sets out guidelines that jurisdictions must consider when designating these areas. As set forth in the WAC guidelines, Fish and Wildlife Habitat Conservation Areas include:

- a) Areas with which endangered, threatened, and sensitive species have a primary association;
- b) Habitats and species of local importance;
- c) Commercial and recreational shellfish areas;
- d) Kelp and eel grass beds; herring and smelt spawning areas;
- e) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;
- f) Waters of the state;
- g) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; or
- h) State natural area preserves and natural resource conservation areas.

It is important to note that for some species, mere presence is not considered significant. Significant habitats, for some species, are those areas that may be limited during some time of the year or stage of the species life cycle. King County has reviewed these guidelines and has developed policies E-168 through E-172 that address the various species included in the WAC guidelines. These policies recognize the tiered listing of these species and their habitats as defined by the United States Fish and Wildlife Service and the Washington State Department of Fish and Wildlife. These policies also recognize the need to regularly review the information developed on species and habitats and amend the tiered listing as appropriate.

- E- 168 King County shall designate and protect, through measures such as regulations,**

Comment noted. BPA does not anticipate the need to stabilize any stream channels associated with the Proposed Action.

KCC 21A.24.130 — As determined by King County, mitigation, maintenance and monitoring shall be in place to protect sensitive areas and buffers from alterations occurring on the development site.

BPA has identified the environmental impact of the proposed project along with a list of mitigation measures that are designed to eliminate, or at least minimize, the resulting environmental impacts. BPA proposes to undertake monitoring activities to ensure that any impacts are minimized.

With respect to maintenance activities, BPA would maintain the proposed transmission line and related facilities to ensure safe and reliable transmission of high voltage electric power over the life of the facility, and also to comply with the easement BPA would have with the underlying landowners.

KCC 21A.06.750 — Mitigation defined.

KCC 21A.24.380 (D) — Replacement or enhancement is required when a stream or buffer is altered. Replacement or enhancement shall result in no net loss of stream functions and result in no impact to streams.

BPA anticipates no alteration to streams as a result of the proposed project, however, stream buffers would be affected. Approximately 14 acres of wetland buffers and stream buffers would be affected by the Proposed Action (see revised Appendix D).

KCC21A.24.380 (F) — Mitigation shall be on site and in-kind unless on site mitigation is not possible, mitigation occurs within the same subbasin and greater biologic and hydrologic functions are achieved.

BPA understands this King County ordinance and will work with the County to develop acceptable mitigation that meets both agencies' needs.

incentives, capital projects or purchase, the following Fish and Wildlife Habitat Conservation Areas found in King County:

- a) Habitat for federal or state listed Endangered, Threatened or Sensitive species.
- b) Habitat for Salmonids of Local Importance: kokanee/sockeye/red salmon, chum salmon, coho/silver salmon, pink salmon, coastal resident/searun cutthroat, rainbow trout/steelhead, bull trout, Dolly Varden, and pygmy whitefish, including juvenile feeding and migration corridors in marine waters;
- c) Habitat for Raptors and Herons of Local Importance: red-tailed hawk, osprey, black-crowned night heron, and great blue heron;
- d) Commercial and recreational shellfish areas;
- e) Kelp and eelgrass beds;
- f) Herring, sand lance and smelt spawning areas;
- g) Wildlife habitat networks designated by the County, and
- h) Riparian corridors.

King County shall also protect the habitat for candidate species, as listed by the Washington Department of Fish and Wildlife, found in King County outside of the Urban Growth Area.

- E- 169 King County should protect the following species of local importance, as listed by the Washington Department of Fish and Wildlife and listed by King County, on lands outside of the Urban Growth Area, where they are likely to be most successful. Protection should be accomplished through regulations, incentives or purchase. Species of local importance are:
- a) mollusks - Geoduck clam and Pacific oyster;
 - b) crustaceans - Dungeness crab and Pandalid shrimp;
 - c) echinoderms- Red urchin;
 - d) fish - white sturgeon, Pacific herring, channel catfish, longfin smelt, surfsmelt, Pacific cod, Pacific whiting, black rockfish, copper rockfish, quillback rockfish, yelloweye rockfish, lingcod, Pacific sand lance, English sole, and rock sole;
 - e) birds - Trumpeter swan, Tundra swan, Snow goose, Band-tailed pigeon, Brant, Harlequin duck, Blue grouse, Mountain quail, and Western bluebird;
 - f) mammals - marten, mink, Columbian black-tailed deer, elk, and mountain goat.
- E- 170 King County should protect the following priority habitats listed by the Washington Department of Fish and Wildlife that are not otherwise protected by policies and codes. Protection should be accomplished through regulations, incentives or purchase. Priority habitats are: caves, cliffs, consolidated marine/estuarine shorelines, estuary, old growth/mature forest, unconsolidated marine/estuarine shorelines, snag-rich areas, and talus slopes.
- E- 171 Development proposals should be assessed for the presence of species of local importance. A comprehensive assessment should follow a standard procedure or guidelines and shall occur one time during the development review process.

Existing buffer requirements for streams and wetlands are not intended to, and do not, always adequately protect wildlife resources in those sensitive areas. Areas with critical wildlife resources may need larger buffers to protect the resource.

- E- 173 Stream and wetland buffer requirements may be increased to protect species of local importance, as listed in this chapter, and their habitats, as appropriate. Whenever possible, density transfers and/or buffer averaging should be allowed.

KCC 21A.24.070 — Exceptions to the stream standards are allowed if no practical alternative exists with less impact on the sensitive area and the proposal minimizes impacts on sensitive areas.

BPA understands this exception to the stream standard, adopted by King County Code.

395-018, -019, and -020 Comments noted. At the time the DEIS was released, BPA had not yet designed the proposed project. BPA routinely uses the environmental process to design its facilities. If BPA were to complete the design of its facilities prior to initiating the environmental review, the affected/interested publics could not provide meaningful and timely input into BPA's decision-making process. Therefore, the design of a project typically parallels the environmental process, with the environmental review out front.

BPA has now delineated all of the sensitive areas within the proposed right-of-way and has sited all of its facilities (substation expansion, tower sites and access/spur roads) on uplands. No wetlands would be filled as a result of the project. To do so, BPA would implement extraordinary measures to construct the project, including requiring the contractor to construct most towers with a helicopter instead of a truck mounted boom. Doing so would reduce the road width normally needed. Additionally, BPA would be using a new footing design (micropiles) to reduce the disturbance area at each tower site. See Section 2.1.1.1 of the SDEIS.

BPA disagrees with the County's evaluation of its proposed project being inconsistent with its land use plans and zoning ordinance. In designing its projects, BPA tries to be consistent with all federal, state and local plans and programs to the extent practicable, while still meeting the National Electric Safety Code requirements, and its own right-of-way maintenance criteria for safe construction, operation and maintenance of its facilities. While BPA is not an "applicant" here, since it is a federal agency and Congress has not waived federal supremacy, it tries to meet or exceed state and local plans and programs to the extent practicable.

Salmon are particularly important because of their significance to local and regional character, federally recognized tribes and the fisheries industry. Several salmon stocks within King County and other areas of Puget Sound are in a serious state of decline. Several salmon stocks within King County have been or are about to be listed under the Endangered Species Act. The most effective way to protect and enhance native fish populations is through protection of those river and stream channels, riparian corridors, lakes, wetlands, headwaters and watersheds that provide or impact spawning and rearing habitat, food resources and fish passage. Intermittent streams also can be critical to native fish populations. Fish enhancement facilities currently are still critical to the maintenance of salmon stocks and the fisheries industry.

E- 174 King County should protect salmonid habitats by ensuring that land use and facility plans (transportation, water, sewer, electricity, gas) include riparian and stream habitat conservation measures developed by the County, cities, federally-recognized tribes, service providers, and/or state and federal agencies. Development within basins that contain fish enhancement facilities should consider significant adverse impacts to those facilities.

Protection of isolated blocks of habitat will not adequately protect wildlife in King County. Critical wildlife habitats and refuges need to be connected across the landscape through a system of habitat networks. Some areas may be important because they connect other areas together.

Network width is related to requirements of desired wildlife species, length of network segment and other desired uses within the network. Wider corridors will be required for larger species if the distance between refuges is great or if multiple uses, such as public access and trails, are desired. Since it may not be possible to protect wide corridors in the Urban Growth Area, it may not be possible to accommodate larger wildlife species in all areas. Networks will address some of the problems of habitat fragmentation for smaller species within the Urban Growth Area.

Potential linkages are identified on the Wildlife Network and Public Ownership Map. Open spaces set aside during subdivision of land should be located to make connections with larger off-site systems. This approach will also benefit other open space goals.

E- 175 Dedicated open spaces and designated sensitive areas help provide wildlife habitat. Habitat networks for Threatened, Endangered and Priority species of local importance, as listed in this chapter shall be designated and mapped. Habitat networks for other Priority Species in the Rural Area should be designated and mapped. Planning should be coordinated to ensure that connections are made with adjacent segments of the network. King County should provide incentives for new development within the networks to incorporate design techniques that protect and enhance wildlife habitat values.

King County shall also protect the habitat for candidate species, as listed by the Washington Department of Fish and Wildlife, found in King County outside of the Urban Growth Area.

See response to Comment 395-006.

Having proposed extraordinary measures to avoid sensitive areas and mitigate potential impacts, BPA believes that the proposed project is consistent with the King County's land use plans and zoning regulations to the maximum extent practicable.

Construction specifications would be developed before construction that would show sensitive areas and clearing required.

395-021 Comment noted. BPA agrees to provide the appropriate level of compensatory mitigation for all unavoidable impacts to sensitive areas, as provided by the King County Code.

395-022 through -028 BPA has prepared a wetland report (see revised Appendix D) and a Wetlands Delineation Report (sent under separate cover). These reports identify the location of the sensitive areas, the measures BPA has taken to avoid the sensitive areas to the extent that it can, and what measures would be taken to reduce impacts to the maximum extent practicable.

395-029 Herbicides would not be used anywhere on the Cedar River Watershed. Outside the Watershed, it is unlikely herbicides would be used in wetlands and wetland buffers.

395-030 through -034 Please see responses to Comments 394-022, 395-009, -014, -015, -016, and -017.

395-035 See response to Comment 395-029.

395-036 Potential impacts to these corridors are discussed in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B).

395-037 This source of disturbance is included in construction activities and is described in Section 4.1 of the Wildlife Technical Report (Appendix B).

395-038 Impacts to these species are analyzed in the Fisheries Technical Report (revised Appendix A) and Wildlife Technical Report (Appendix B).

The foregoing King County Comprehensive Plan stream and shoreline policies are implemented by the zoning code provisions paraphrased below and as outlined within the Wetland and Streams/Rivers Sections of this letter. King county zoning precludes development from occurring within wildlife corridors unless these minimum requirements area satisfied.

21A.14.260- Wildlife habitat corridors-applicability.

21A.14.270-Wildlife habitat corridors- Design standards.

(A) The wildlife corridor shall be meet the following conditions:

1. Forms on contiguous tract that enters and exits the property at the points the designated wildlife habitat network crosses the property boundary
2. Maintains a width, wherever possible of 300 feet. The network width shall not be less than 150 feet wide at any point.
3. Be contiguous with and may include sensitive area tracts and their buffers, and where feasible, the corridor shall connect isolated sensitive areas or habitat and connect with wildlife habitat corridors, open space tracts or wooded areas on adjacent properties.

The Washington Administrative Code (WAC) 197-11 includes the State Environmental Policy Act (SEPA) regulations. WAC 197-11-660 states that local government shall base mitigation measures on policies, plans, rules or regulations formally designated by the appropriate legislative body. King County's Comprehensive Plan is substantive authority under the SEPA rules. The policies to protect wildlife habitat are found in Section VI, A and B, of the Natural Environment chapter. To protect this habitat, King County must adequately condition development permits.

In order to implement Policy E-175, a draft set of Wildlife Study Guidelines was prepared in August 1993. Wildlife studies prepared by consultants and submitted with permit applications are expected to follow these Guidelines.

Under the King County Wildlife Study Guidelines, projects that are greater than 5 acres located within the rural area and having no special wildlife criteria present, at a minimum, will require a habitat survey. If areas contain special wildlife criteria, additional studies may be required. Special wildlife criteria in rural developments include the presence of threatened or endangered species, site location within a wildlife management area (WMA), or the presence of priority habitats and/or species.

Specific surveys may include a habitat survey, wildlife survey, and threatened or endangered species report for the proposal, as described in the 1993 "Wildlife Study

395-039 and -040 Comment noted.

395-039

395-040 Guidelines for SEPA”, Draft by King County Resource Planning. The proposed project must assess impacts on raptors and other King county Priority avian species including eagle and red-tailed hawks, great blue heron and pileated woodpecker. Include nesting and habitat impacts, as well as flightway disruptions and perch safety. Additionally, per the King County Code, site specific special study may be required to evaluate impacts on salmonids of local importance as specified in the Comprehensive plan, as well as bull trout and Chinook salmon (see Streams/Rivers).

2.1 Proposed projects consistency with King County’s land use land use plans and zoning regulations for Fish and Wildlife

395-041 Based on the information obtained in the required studies and reports, additional fish and wildlife studies/evaluations and mitigation will be required to assure that significant impacts do not occur to priority King County Species or Habitats (also see wetlands and streams/Rivers) and that the project is consistent with King County land use and policy regulations.

395-042 As noted within Appendix B, Wildlife Technical Report, of the DEIS, wildlife species and their habitats occurring or potentially occurring within the project area were discussed at two levels. The first was a very general discussion of a broad project area. The second included a more specific discussion of species and habitats within 0.25 mile of the proposed transmission line ROWs. The information used to identify potentially occurring species or habitats within this study area relied on the WDFW priority habitats database, the HCP for the Cedar River Watershed, other literature, habitat types identified through aerial photography interpretation, and limited habitat field reconnaissance. Based on the proposed project description, the 0.25 mile evaluation corridor on either side of the proposed ROW does not appear to be a sufficient width to accurately evaluate potential impacts to wildlife species. For example, the blasting of bedrock to install tower footings has the potential to effect wildlife species within 1 mile of these activities. Nesting pairs of bald eagles (and wintering populations), spotted owls, northern goshawks, red-tailed hawks, great blue heron colonies, and other avian species could be impacted by the noise disturbance. To more accurately identify species, potential impacts, and associated mitigation measures, the remote habitat evaluations and databases and other literature should be used to identify where sensitive species (federally listed and King County Priority species) occur or are likely to occur within 1 mile of the ROW. Standard or modified survey protocols for sensitive species should be conducted in potentially effected habitats (habitats associated with sensitive species) or areas where significant noise disturbance would occur (blasting) to determine species presence. The location of surveys, size of the survey areas, and survey intensities should be determined/justified based off of the proposed project activity and associated habitats and species sensitivity to project disturbances. Habitat removal, noise disturbance, habitat fragmentation, and bird collision potential (description of flyway needed and nearby high bird concentration areas) with towers should all be considered in identifying species to be surveyed. In areas where species are determined to be present that could be significantly effected/adversely effected by project activities, mitigation measures should be developed

395-041 Appendix B and Section 4.9 of the SDEIS have been expanded to provide additional information on impacts to wildlife. BPA has been in formal consultation with the U.S. Fish and Wildlife Service and has completed informal consultation with NOAA Fisheries (see Appendix U).

See response to Comments 394-062, 394-088, 394-096, 394-098, 394-100, 394-101, 394-102, 394-227, 394-236, 394-237, 394-240, 394-241, 394-242, 394-247, and 395-006 for additional information on impacts to wildlife.

- 395-042 | to avoid or reduce impacting these species (e.g. seasonal construction restrictions, ROW siting modification or/or facility siting modification, etc.). King County typically relies on management recommendations outlined in the Washington Department of Fish and Wildlife Management Recommendations for Washington's Priority Habitats and Species and other internal documents to identify mitigation for sensitive species.
- 395-043 | Per King County land use plans and zoning regulations, wildlife corridor networks must maintain a width, wherever possible of 300 feet. The network width shall not be less than 150 feet wide at any point. Clearing of the two wildlife corridors would therefore not be consistent with King County land use plans and zoning regulations. The proposed project would need to demonstrate that the wildlife corridors would be maintained in their existing conditions. The project should evaluate the use of alternative ROW siting or transmission line spanning techniques to avoid impacting existing wildlife corridors. If it is found that the wildlife corridors cannot be maintained at their existing locations, an analysis should be performed to determine if alternative and appropriate habitat corridors could be established in the immediate vicinity. The corridors would need to meet the design standards in KCC 21A.14.270.
- 395-044 | As stated within Appendix A, Final Fisheries Technical Report, of the DEIS, the impact assessment for the analysis relied upon remote methods to identify potential fish-bearing streams. As identified in Section 1.3 of this letter under Wetlands and Streams/Rivers, to be consistent with King County land use plans and zoning regulations, site specific stream analyses will need to be performed to accurately identify and classify all streams that occur within the identified ROW. For all streams that may be directly effected by ROW crossing, a Level 1 stream survey should be conducted. The survey must include two reaches equal to 20 times the average stream width both up and downstream of the crossing. For all Class 1 and 2 stream crossings that would require work within the OHWM (roads, culverts, other facilities), a Level II analysis may need to be completed. This would include 1) a list of all fish, including their life histories, that are know to inhabit the stream, 2) spanner counts for all anadromous salmonids that use the particular stream where the crossing occurs (WDF format), 3) redd surveys for all anadromous salmonids that use the streams, 4) electrofish the crossing sites during April and May to determine juvenile rearing use.
- Mitigation including an alternative evaluation (see Wetlands and Streams/Rivers) would need to be identified for potentially impacted streams and rivers.
- 395-045 | **Shorelines**
King County's Shoreline Management Master Program (Title 25 of the King County Code) is a functional plan developed in compliance with the Washington State Shoreline Management Act of 1971. The Master Program protects streams with a mean annual flow of 20 cubic feet or more per second, lakes that are 20 acres or more in size, the marine shoreline of Puget Sound and wetlands associated with these systems.
- E- 124 Development within designated Shoreline Environments shall preserve the resources**

- 395-042 | See response to Comment 394-065. In addition, the potential for noise disturbance outside of the 0.25-mile corridor is recognized and discussed in Section 4.7.2.5 and mitigation described in Section 4.7.2.10 of the SDEIS.
- 395-043 | As mentioned in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B), the proposed transmission line would span the Cedar River and so it is expected that the corridor in that area would remain largely intact. The other corridor would likely be impacted. See response to Comment 340-002 for information about compensatory mitigation.
- 395-044 | Please see response to Comment 394-022. All streams would be spanned.
- 395-045 and -046 | Comments noted. BPA's proposed project would cross over two Class 1 Streams (the Cedar and Raging rivers), however, the proposed project would not involve any ground disturbing activities within 200 feet of these streams; therefore, BPA would not be considered to be directly affecting the coastal zone, and no substantial development permit from King County is needed.

and ecology of the water and shorelines, avoid natural hazards, promote visual and physical access to the water, protect ESA listed species and their critical habitat, and preserve archeological, traditional cultural resources, shellfish resources, and navigation rights. Protection of critical areas shall take priority over visual values and physical access.

- Utility construction should be encouraged to locate where water quality will be maintained or improved.
- Utility corridors should be encouraged to consolidate or share rights of way.
- Public access should be encouraged.
- Utility routes should be designed to minimize visual impact from the water and upland areas.
- Utility facilities and rights of way should be selected to preserve the natural landscape and minimize conflicts with present and future land uses.
- Utility facilities and rights of way should be selected to preserve the natural landscape and minimize conflicts with present and future land uses.
- Utility facilities should be located to not require extensive shoreline protection nor to restrict water flow, circulation or navigation.

The shoreline policies and Comprehensive Plan policies referenced above are both implemented through code provisions paraphrased below.

KCC 25.04.030 Scope. (A) and (C).

(A) No development shall be undertaken by any person on the shorelines of the state unless such development is consistent with the provisions of this title and the goals, policies and objectives of the master program.

(C) Development proposed on property adjacent to water bodies or wetlands under the jurisdiction of the Shoreline Management Act shall be evaluated in terms of the goals, policies and objectives of the master program. (Ord. 3688 § 103, 1978).

KCC 25.04.050 Relationship to other King County programs. A. When provisions of this chapter conflict with the sensitive areas code, K.C.C. Chapter 21A.54, that which provides more protection to the sensitive area shall apply.

KCC 25.20.110 Utilities. Utility facilities may be permitted in the rural environment subject to the utilities requirements (Section 25.16.160) of the urban environment and the general requirements (Section 25.20.030) of this chapter. (Ord. 3688 § 511, 1978).

25.20.030 General requirements. (A), (C), (D), (E), (F), and (G)

(A) Nonwater related and residential development shall not be permitted waterward of the ordinary high water mark.

(C) All development shall be required to comply with K.C.C. chapter 9.04 to control runoff and to provide adequate surface water and erosion and sediment control during the construction period.

D. Development shall maintain the first fifty feet of property abutting a natural environment as required open space.

E. Parking facilities except parking facilities associated with detached single-family and agricultural development shall retain existing vegetation or be planted in conformance with the landscape standards enumerated in the general requirements (K.C.C. 25.16.030) of the urban environment.

F. Water quality treatment in compliance with K.C.C. chapter 9.04 shall be required where stormwater runoff would materially degrade or add to the pollution of recipient waters or adjacent properties.

G. The regulations of this chapter have been categorized in a number of sections; regardless of the categorization of the various regulations, all development must comply with all applicable regulations.

25.20.140 Excavation, dredging and filling. (A) Excavation, dredging and filling may be permitted in the rural environment subject to the provisions of K.C.C. 25.16.190.

25.24.030 General requirements (A), (C), (D), and (G).

(A). Nonwater related, water related and residential development shall not be permitted waterward of the ordinary high water mark.

(C) All development shall be required to comply with K.C.C. chapter 9.04 to control runoff and to provide adequate surface water and erosion and sediment control during the construction period.

(D). Development shall maintain the first fifty feet of property abutting a natural environment.

(G). The regulations of this chapter have been categorized in a number of sections; regardless of the categorization of the various regulations, all development must comply with all applicable regulations.

25.24.140 Excavation, dredging and filling.

A. Excavation below the OHWM is allowed in the conservancy environment only to mitigate public safety concerns and fisheries impacts.

C. Excavation or dredging of marshes, swamps or bogs shall not be permitted

25.16.160 Utilities. Utility facilities may be permitted in the urban environment subject provided that:

A. Utility and transmission facilities shall:

1. Avoid disturbance of unique and fragile areas;

- 2. Avoid disturbance of wildlife spawning, nesting and rearing areas;
- 3. Overhead utility facilities shall not be permitted in public parks, monuments, scenic recreation or historic areas.

B. Utility distribution and transmission facilities shall be designed so as to:

- 1. Minimize visual impact;
- 2. Harmonize with or enhance the surroundings;
- 3. Not create a need for shoreline protection;
- 4. Utilize to the greatest extent possible natural screening.

C. The construction and maintenance of utility facilities shall be done in such a way so as to:

- 1. Maximize the preservation of natural beauty and the conservation of resources;
- 2. Minimize scarring of the landscape;
- 3. Minimize siltation and erosion;
- 4. Protect trees, shrubs, grasses, natural features and topsoil from drainage;
- 5. Avoid disruption of critical aquatic and wildlife stages.

D. Rehabilitation of areas disturbed by the construction and/or maintenance of utility facilities shall:

- 1. Be accomplished as rapidly as possible to minimize soil erosion and to maintain plant and wildlife habitats;
- 2. Utilize plantings compatible with the native vegetation.

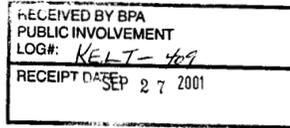
E. Solid waste transfer stations shall not be permitted within the shorelines of the state.

395-046

“Shorelines of the State” which appear to be associated with the preferred alternative include the Cedar River, Raging River, and other streams with flows of more than 20 cfs, and their associated wetlands. Since the proposed alternative appears to cross several shorelines of the state and constitutes a substantial development, a shoreline substantial development permit from King County would be required. Therefore, to be consistent with King County Comp Plan policies and zoning regulations, the BPA would need to submit information that demonstrates the project is consistent with the King County Shoreline Master Program as outlined above.



King County Executive
RON SIMS



September 10, 2001

Lou Driessen, Project Manager
Bonneville Power Administration
PO Box 3621
Portland, Oregon 97208

Dear Mr. Driessen:

Thank you for the opportunity to review the Draft Environmental Impact Statement for the Kangley-Echo Lake Transmission Line Project. Ample and reliable electrical power service is of course necessary for our region; however, locating and constructing new transmission lines inevitably creates substantial impacts. For this reason, the EIS must clearly demonstrate why a new transmission line corridor is necessary to ensure system reliability and, if so, include thorough analysis of potential impacts and adequate mitigation for those identified impacts.

The foothills of the Cascades are a high value forest resource. The Cedar River Watershed encompasses a unique lowland forest that will be protected in perpetuity, thanks to the City of Seattle's vision and commitment. Together, the Cedar River Watershed and the Raging River valley form a critical ecological connection between the Cascade Mountains, Tiger Mountain State Forest, Taylor Mountain and Rattlesnake Ridge, providing a crucial wildlife corridor between the foothills and the higher elevation forests of the Cascades. King County has been making tough choices to ensure compliance with the Endangered Species Act, and has been implementing a variety of programs to maintain the forest land base for its economic and habitat values. The City of Seattle is working to implement their Habitat Conservation Plan for the Cedar River Watershed. A new transmission line through the forest lands of the Raging River valley and the Cedar River Watershed will affect these efforts, and we anticipate that as a public agency, BPA will seek to work cooperatively with us and with the City of Seattle to make sure our efforts are not diminished.

National Environmental Policy Act regulations require that an EIS discuss possible conflicts between the proposed action and local land use plans and policies. The 2000 King County Comprehensive Plan includes policies encouraging energy conservation and calling for the use of existing transmission corridors first:

KING COUNTY COURTHOUSE 516 THIRD AVENUE, ROOM 400 SEATTLE, WA 98104-3271
(206) 296-4040 296-0194 FAX 296-0200 TDD E-mail: ron.sims@metrokc.gov

King County is an Equal Opportunity/Affirmative Action Employer and complies with the Americans with Disabilities Act

409-001 Comment noted.

409-001

F-303 Efficient energy consumption, conservation, the use of renewable technologies, and energy responsible land use decisions should be a priority in King County. King County promotes the maximum use of energy conservation and renewable energy resources now, while leaving options for increasing conservation and renewable technologies in the future.

F-310 When new, expanded or upgraded transmission is required, use of existing corridors that have above-ground utilities should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.

409-002 The EIS should include a more in-depth analysis of how the proposal complies with these policies. Specifically, the EIS should include an explanation of the electrical transmission system serving the King County area, and an analysis that shows the current situation, how conservation could alleviate future needs and other improvements BPA is considering in the future. The analysis should demonstrate why an increase in service is necessary.

409-003 Further, it appears possible to double service by rebuilding the existing transmission towers within the current corridor to accommodate two sets of circuits, but the DEIS dismisses this alternative as too difficult in the short term. A broader analysis of the regional system should be included in the EIS to demonstrate whether or not the system has sufficient flexibility to allow for this alternative, which best meets policy F-310, above. Constructing a new transmission line adjacent to the existing corridor as proposed is less disruptive than the other alternatives and therefore preferred, but should only be considered if rebuilding in the existing corridor is clearly demonstrated to be unworkable.

409-004 The 2000 King County Comprehensive Plan also includes a body of policies addressing protection of forest resources and environmental features that have not been considered in the DEIS. Transmission lines have had substantial impacts on forests, related wildlife, streams and wetlands. The proposal would result in further loss and fragmentation of active forest land and wildlife habitat, and the impacts of construction and operation could adversely affect compliance with the Endangered Species Act and diminish efforts to recover salmon and other listed species. The proposal also brings added risks to protecting water quality in a watershed that supplies drinking water for much of the county. These impacts are significantly downplayed in the DEIS, and the proposed mitigation measures are inadequate to offset the impacts.

409-005 If use of the existing corridor proves to be unworkable, the proposal will be a substantial project consisting of nine miles of new 500kV transmission line, with a cleared swath at least 150 feet wide through mature forest and crossing rivers, streams and wetlands. It also includes construction of at least a mile and a half of new road, three staging areas of undetermined size and location, plus a three-acre expansion of an existing substation. None the less, the project is described as affecting only "...relatively small areas..." and resulting in "...only a low impact." The DEIS also fails to discuss the cumulative impacts of transmission lines criss-crossing the forests of this region, rating the impact of forest loss as low.

409-002 and -003 Please see response to Comment 349-001 for more information about conservation. Please see the response to Comment 340-003. A new alternative discussing potential non-transmission alternatives was added to the SDEIS to fully disclose current non-transmission options. Additional information about the purpose and need for the project have been added to Chapter 1 of the SDEIS. Alternative actions that were considered but dropped, including double-circuiting in the existing right-of-way through the Cedar River Watershed, are described in Section 2.3 of the SDEIS.

409-004 See response to Comment 340-002.

409-005 See response to Comment 340-002.

Lou Driessen
September 10, 2001
Page 3

409-006

As a partner in the region, we expect an earnest analysis of the impacts of the proposal on forest resources, habitat and water resources, and look forward to working with BPA to identify appropriate mitigation. The most reasonable mitigation for any permanent damage or loss of forest land and habitat is replacement. Within King County, any lost wetland habitat must be replaced at a 2:1 ratio. King County has worked to assemble blocks of forest land in the vicinity of the project; there are several parcels adjacent to King County's assembled lands and the City's Watershed, as well as parcels in the upper Rock Creek valley and along the Green River that would be excellent candidates for forest land and habitat replacement for land lost through the project.

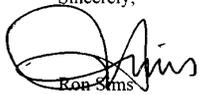
409-007

Further, the Raging and Cedar River riparian areas provide especially important habitat for terrestrial species. As the forest in the Cedar River Watershed grows, this area could provide significant habitat for spotted owls and marbled murrelets, and murrelets may be using the upper Watershed today. Transmission lines crossing the Raging and Cedar Rivers should be high enough to allow coniferous forests to grow to maturity in the riparian zone of the river and adjacent slopes.

408-008

At this time, the EIS inadequately addresses the need to construct a parallel transmission line, the full range of impacts of the preferred alternative, conflicts with King County policy and the appropriate mitigations for the full range of impacts. We look forward to working with you to resolve these deficiencies, and to help you select replacement lands for lost forest resources and habitat. For assistance, please contact Lori Grant, King County Office of Regional Policy and Planning, at 206-296-3458.

Sincerely,



Ron Sims
King County Executive

cc: Pam Bissonnette, Director, Department of Natural Resources
Stephanie Warden, Director, Office of Regional Policy and Planning
ATTN: Lori Grant, Office of Regional Policy and Planning

409-006 See response to Comment 340-002.

409-007 Comment noted.

409-008 Comment noted.



**King County
Rural Forest Commission**
201 S Jackson Street, Suite 600
Seattle, WA 98104
Phone (206) 296-7805
FAX 296-0516

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-413</i> RECEIPT DATE: OCT 15 2001
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Doug McClelland
Chair
Washington State Department of
Natural Resources

October 5, 2001

Ken Konigsmark
Vice Chair
Open Space/Trails Advocate

Lou Driessen, Project Manager
Bonneville Power Administration
PO Box 3621
Portland, Oregon 97208

Jean Bouffard
Rural Cities Representative

Dear Mr. Driessen:

Gordon Bradley
University of Washington
College of Forest Resources

On behalf of the King County Rural Forest Commission, I would like to comment on the proposed Kangley-Echo Lake Transmission Line Project. The Rural Forest Commission is an advisory body appointed by the King County Executive and Council to make recommendations on issues pertaining to forestland and forestry in the County. As such, our comments are limited to the issue of the project's impact on forestland in King County.

Rudy Edwards
Mt. Baker/Snoqualmie
National Forest

Louis Kahn
Landowner

Steven H. Ketz
Weyerhaeuser Company

Bill Kombol
Forest Landowner

Matt Mattson
Snoqualmie Tribe

Fred C. McCarty
Forest Landowner

Andrew W. Schwarz
Forest Landowner

David Warren
Pacific Forest Trust

While we understand the need to provide the region with an adequate and reliable supply of electrical power, we have serious concerns about the impacts on forestland of the proposed alternative outlined in the Draft Environmental Impact Statement for this project. The forests of the Cascade foothills are a very valuable resource to this region. They are ecologically different from the higher elevation forests of the Cascades and provide habitat for a large variety of wildlife and fish species. They provide us with a source of clean drinking water, and they help clean the air. Much of the privately owned forestland also supports timber production as well as any forestland in the world.

This valuable resource is extremely threatened by encroaching development, and King County has allocated substantial resources to keeping the forest landscape forested and to establishing a critical ecological connection between the Cascade Mountains, Tiger Mountain State Forest, Taylor Mountain, Rattlesnake Ridge, and the Cedar River Watershed. The City of Seattle has also invested in the future of the region's forest landscape by ensuring the preservation of the Cedar River Watershed and developing a Habitat Conservation Plan that will restore old growth forests to the watershed that provides 1.5 million people with their drinking water.

413-001 Comment noted.

413-001

Lou Driessen, Project Manager
October 4, 2001
Page 2

The National Environmental Policy Act requires that an EIS address possible conflicts with local land use plans and policies. The King County Comprehensive Plan outlines the following policies focused on the conservation of forestland:

R- 506 Land uses, utilities and transportation facilities adjacent to Designated Agriculture and Forest Production Districts and Designated Mineral Resource Sites, shall be sited and designed to ensure compatibility with resource management.

R- 523 Structures within the Forest Production District should be sited to maintain the productivity of the district. Site plan requirements should limit impervious surface, provide for fire control, protect domestic water supply and prevent conflicts with forest management.

R- 531 King County promotes forest management that achieves long-term forest health, protection of watersheds, sensitive areas and habitat to support fish and wildlife populations, protection of threatened and endangered species, and preservation and economic viability of working forests.

413-002 | The DEIS does not adequately address how the proposed alternative complies with these policies. The expansion of the existing power line will result in the elimination of as much as 300 acres of forestland to accommodate the right-of-way, the expansion of the sub-station, and the staging areas. This clearing not only results in lost forestland, but also contributes to the fragmentation of the landscape. The DEIS states that the impact to forestland would be low, but we believe the loss of those acres in a forest ecosystem as threatened as this one is not an insignificant impact. Indeed, it is quite significant and is not in line with the King County policies outlined above.

413-003 | The DEIS also fails to explain the need for an additional power line or account for the cumulative impact of BPA's power lines throughout the region. BPA power lines have resulted in the loss of a substantial amount of forestland in eastern King County, and we question not only whether this line is necessary, but also how it fits with BPA's future plans to address the growing population in the County. The DEIS needs to evaluate the impact of this project in the larger scope of BPA's work Countywide.

Based on the above concerns, the Rural Forest Commission makes the following recommendations:

- 413-004 |
- BPA needs to publish a supplemental DEIS that addresses the true impact of clearing up to 300 acres of forestland and how that contradicts policies laid out in King County's 2000 Comprehensive Plan. The supplemental DEIS should also address the cumulative impacts on forestland of BPA's projects throughout the County and better explain the need for this project.
- 413-005 |
- BPA should give more serious consideration to other alternatives, including rebuilding the existing transmission towers and adding a second circuit within the current corridor. While this alternative may be more costly in the short term, we question whether it may in fact be more appropriate when the long term cost of lost forestland is taken into account.

413-002 Please see responses to Comment Letter 395.

413-003 Please see response to Comment 339-001.

413-004 See response to Comments 411-006, 349-001, and 394-090.

413-005 Please see the response to Comment 340-003.

Lou Driessen, Project Manager
October 4, 2001
Page 3

413-006

- If Alternative 1 does prove to be the best alternative after a more thorough analysis, then we suggest that BPA mitigate the loss of forestland by acquiring and protecting similar forest land in the vicinity that is threatened with conversion to non-forest uses. Such mitigation is similar to the county's requirements for mitigating development of wetlands. If mature forests such as those that would be impacted in the Cedar River Watershed cannot be found, then the agency's mitigation should be discounted, or additional acreage should be acquired to offset the reduced quality of the forest. As mentioned, the forests in King County's foothills are a threatened resource, and the County is working hard to prevent the conversion of this forestland to non-forest use. There are several parcels adjacent to the Cedar River Watershed, on Taylor Mountain, and in the Rock Creek Watershed that are quite threatened, and it would be very appropriate for BPA to mitigate the impact caused by this project by conserving forest in these areas.

413-007

- Finally, BPA needs to better address the management of the land within its power line right-of-ways. While we do not condone the loss of forestland, the impact of BPA corridors on the ecological health of the region, and on the species that thrive in the foothills, could be lessened by managing the right-of-ways to control noxious weeds and planting native species that contribute to the health of the landscape.

We thank you for considering these comments, and we look forward to working with BPA and King County in efforts to develop a constructive solution.

Sincerely,



Doug McClelland
Chair, King County Rural Forest Commission

cc: Ron Sims, King County Executive
Larry Phillips, King County Councilmember
David Irons, King County Councilmember
Suzanne Flagor, Seattle Public Utilities, Watershed Management Division
Lori Grant, Executive Office
Pam Bissonnette, Director, Department of Natural Resources
Benj Wadsworth, Forestry Program Analyst

413-006 See response to Comment 340-002.

413-007 Please see response to Comment 382-017.

Tribes



**MUCKLESHOOT
CULTURAL RESOURCES PROGRAM**

39015 172nd Avenue S.E. • Auburn, Washington 98092-9763
Phone: (360) 802-2202 • FAX: (360) 802-2242



September 4, 2001

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-405</i>
RECEIPT DATE: SEP 13 2001

Communications
Bonneville Power Administration, KC-7
P.O. Box 12999
Portland, OR. 97212

Dear Mr. Driessen,

405-001

The Muckleshoot Wildlife and Cultural Resources Programs appreciates the opportunity to comment on the "Kangley - Echo Lake Transmission Line Project, Draft Environmental Impact Statement" ("DEIS"). The proposed project may result in harm to resources that are value to the Muckleshoot Indian Tribe within the Cedar River Watershed, an especially important traditional cultural and treaty use area. In general, the DEIS fails to acknowledge or take into account the Tribe's present and historic interests in, and utilization of resources in the Watershed that may be adversely affected by the project. As we previously noted in our letter of 2-16-2001, reasonable alternatives outside the Watershed were not fully evaluated. The preferred DEIS Alternative may have the least impact on the environment of the four alternatives evaluated, but not necessarily the least impact, over the long term, of all the alternatives that should have been considered.

The Tribe's comments relating to wildlife, cultural resources, and vegetation management are discussed below. Potential effects on fisheries and water resources of importance to the Muckleshoot Tribe are not addressed here. The views of Muckleshoot Fisheries are not represented, nor does the Tribe waive the right to comment on issues or resources other than those specifically addressed here.

Alternatives development (Section 1.4 page 1-5)

405-002

The DEIS reference BPA "long range" studies looking 5-10 years into the future in order to develop the alternatives under discussion. (These studies, with completion or publication dates, should be cited and included in the literature References). The studies seem to address an extremely short-range time frame. Please explain why you consider this long range planning rather than an interim response to a perceived potential shortage, and how this project provides long-term solutions for the area.

405-003

Part of the rationale for the preferred alternative through the Watershed is that a ROW already exists there. It is logical to assume that within BPA's long range plans, the location of this additional ROW through the Watershed could lead to future additional ROW's, or "loading"

405-001 Please see response to Comment 411-006.

BPA has sited the transmission towers to avoid sensitive natural areas such as streams, wetlands and riparian areas adjacent to streams and wetlands. After selecting these tower sites and the proposed access/spur road locations, BPA gave the Cultural Committee the opportunity to suggest that BPA move any of its facilities, with the exception of angle structures, either ahead on line or back on line, if any cultural materials could neither be harvested or relocated.

If BPA were to decide to build the project, it would inform the Culture Committee as soon as the decision is made, so that the Committee could either harvest or relocate these resources with the permission of the landowners. As mentioned to the Committee in recent correspondence, in many BPA rights-of-way, tribal members routinely harvest berries, roots, and medicinal plants under the transmission lines annually. BPA would work with the Muckleshoot Tribe as with other tribes to identify and take extra caution with vegetation management practices to avoid contaminating gathering sites.

405-002 Prior to deregulation of the electric utility industry, utilities could plan new resources such as new generation, 10 or more years out in the future. Since deregulation, new generation and additional loads can be added over a 5-10 year time frame. So, while in the past long-range planning studies were done over a longer period of time, often 20 years in the future, current planning requirements have changed the time frame considered long term.

The existing line through the CRW was built over 30 years ago. BPA's conservative estimate is that a new line and additional lines added to the infrastructure would serve loads for at least another 30 years. Please also see responses to Comments 382-004 and 382-005 and Appendix H (available on request).

405-003 It is true that the presence of any existing utility facility would be a logical choice for the siting of future proposals. BPA has no plans for additional lines at this time.

of the existing ROW's with taller transmission lines of greater capacity, or other additional construction simply because the infrastructure already exists. Such long term and cumulative effects must be considered in this document, especially considering public benefits of the ecological commitments Seattle has made for the Watershed.

405-004 Within a mid- to long range (10-25) years horizon please develop your discussion of the Canadian Entitlement, how BPA intends to address it, and how this project will provide a long-term solution.

ROW Clearing and Maintenance (Sections 2.1.1.4 and 2.1.5 pages 2-5, 2-11)

405-005 The ROW clearing and maintenance plans should be developed and disclosed in this document in order to evaluate adverse effects and mitigation of effects.

Access Roads (Section 2.1.15 page 2-7)

405-006 The EIS states that "**access road locations have not been defined**". Access routes and required stream crossings should be identified in this document in order to evaluate potential adverse effects and mitigation of effects.

Summary of Impacts Table 2-2 page 2-19

405-007 This table should be modified to reflect the information reflected in MIT's comments, especially as regards Tribal usage of the Watershed and its resources, including the Land Use, Wildlife, Visual Resources, Cultural Resources, Health and Safety, etc).

Land Use: Section 3.4.9 page 3-12:

405-008 The City of Seattle and SPU acknowledge treaty rights and support traditional cultural activities of local Tribes in the Watershed, and are presently working to cooperatively identify and enhance such special uses. The statements in this Section should also acknowledge the Watershed as a special resource area utilized by tribal members, as is acknowledged in Section 3-13 on page 3-65. Other similarly affected sections include Visual Resources (3.11); Socio-economics (3.12) and Noise, Public Health, and Safety (3.14).

Visual Resources: Section 3.11:

405-009 Tribal members have used the area known as the Cedar River Watershed for generations specifically for it's rich resources that have provided sustenance. The land was also used for religious and spiritual purposes as it continues to be today. The document overlooks the fact that there is use within the Watershed boundaries beyond recreation. Evaluation of visual resources, through the view of a Tribal member wishing to practice a scared tradition, was not considered.

Section 3.8 and 4.7 Wildlife:

405-004 More information has been added about the Canadian Entitlement. Please see Appendix I.

405-005 Additional information about clearing and maintenance has been included in the SDEIS.

405-006 Additional information about access roads and stream crossings has been included in the SDEIS.

405-007 BPA has prepared Table 2-3 "Summary of Impacts from Alternatives," by taking the information presented in Section (Chapter) 4 "Environmental Consequences" of the SDEIS and attempting to quantify the level of impact for each resource area as low, moderate, high, or no impacts.

405-008 Comment noted.

405-009 We concur that there is use within the Cedar River Municipal Watershed beyond recreation. The DEIS stated that the Cedar River Municipal Watershed is managed as an ecological reserve (Page 3-3). The document also states that the primary use of the watershed (CRMW) is to provide a reliable, high-quality supply of (drinking) water to the region. And in addition to supplying drinking water, the CRMW is also managed for generation of electric power, for education purposes, and also for recreation i.e., swimming at Rattlesnake Lake.

Although the document did not evaluate the visual impact of a tribal member practicing a sacred tradition within the CRMW, the proposed line would be located immediately adjacent to the existing Raver-Echo Lake 500-kV Transmission Line; therefore, the proposed line would add only slight incremental visual impacts. If the impact of a transmission line would interfere with the aforementioned sacred tradition, then we would assume that such tradition would be practiced elsewhere in the CRMW where no line currently exists.

405-010 Comment noted. However, BPA disagrees with the premise that existing and proposed rights-of-way would negatively impact

405-010 | The Proposed Alternative, as well as the three other alternatives considered, have the potential to negatively impact deer and elk herds of importance to the Tribe. Specifically, the disruption of the existing ROW and creation of a new one could decrease the amount of forage available. As is mentioned in the document, there is a high potential for introduction of non-native species thorough ROW ground disturbance, which are toxic to deer and elk. The ROW maintenance schedule should be included within the document, and specific proposed methods of clearing unwanted vegetation should be discussed in the document.

405-011 |

The Muckleshoot Tribe has offered comments relating to potential mitigation which are mentioned within the EIS. We are concerned, however, of the lack of commitment to actually implement these measures, specifically planting of forbs and grasses as ungulate habitat within the ROW after construction. We request that BPA assist in funding the already ongoing deer and elk studies within the Watershed monitor those areas that are proposed to be cleared. Clarification and specificity regarding development and implementation of aggressive vegetation management programs on page 4-67 is needed. Noxious weed controls have already been defined within the "BPA Transmission System Vegetation Management Program". An explanation as to whether to the proposed program will follow existing recommendations, or whether a new management program is required. If new programs are needed, they should be disclosed in order to evaluate impacts.

405-012 |

Finally, we would like BPA to commit to minimize disturbance to deer and elk within the area by preventing construction during fawning and calving periods.

Section 3.9 and 4.8 Vegetation:

In the "Final Vegetation Technical Report" located within the Appendices, operation and maintenance impacts for all the alternatives are considered to be low despite the concern over colonization from non-native or noxious plant species. The report argues that the stated low-level impact is warranted because invasion could be mitigated. This is contrary to what we have experienced regarding invasive species, including scotch broom. It is very difficult to eradicate these species without the use of chemical sprays, which are prohibited within the Watershed boundaries. The commitment to mitigation may not be feasible without chemicals. The report also states the cumulative effects of the project would include "loss of forested area within CRW, additional road construction, and increased colonization of non-native plants" (Tech Report pg. 36), and that "the project has a potentially high impact for spreading noxious weeds" (4-64). Invasion of noxious weeds has been identified within the document, but we feel that adequate measures to prevent and a plan to deal with introduction of these species have not been seriously considered in sufficient detail. As we have stated in previous meetings with BPA, we are very concerned about the possibility of the ROW becoming invaded with these species and prohibiting the growth of forage for animals and plants that are sacred to Muckleshoot people.

405-013 |

The proposed removal of riparian vegetation to construct the corridor at stream crossings could potentially destroy medicines and plants important to the Tribe. This has not been evaluated. (See Section 4.7.2.6 page 4-47). We are requesting consultation on location of stream crossings and an opportunity to identify and possibly remove plants before construction or

405-014 |

deer and elk herds in the area. With the removal of the over story in the forested environment and the establishment of low-growing vegetation within the cleared right-of-way, more feed would be made available for ungulates such as deer and elk, instead of less. Deer and elk need both feed and cover to survive and be healthy.

- 405-011 | Please see response to Comment 349-005.
- 405-012 | BPA would plant native seed to revegetate disturbed areas within the Cedar River Watershed created by the project. Doing so would minimize the potential for erosion, provide feed for ungulates such as the deer and elk, and minimize the potential for noxious weeds to sprout, or spread where they are already present.

If BPA decides to build the project this year, construction would not begin until after the Record of Decision, now scheduled for August 2003. It is our understanding that the calving and fawning period for deer and elk normally begins in March and typically ends in late spring, around the middle of June. Most, if not all, of the calving and fawning will have already taken place prior to the onset of construction activities.

- 405-013 | Please see responses to Comments 382-017 and 394-108.
- 405-014 | Comment noted. At the time BPA released the DEIS, the proposed transmission line had not been designed. BPA uses the environmental process to help design its projects. After identifying survey points in the field, BPA conducted a wetland and stream determination, tying the location of these sensitive resources to centerline of the proposed transmission line, and then selected tower sites in upland areas to avoid impacting wetlands and streams and their associated wetland areas. While forested wetlands would be converted to nonforested wetlands, BPA would not fill any jurisdictional wetlands as a result of the Proposed Action.

Any trees removed from the forested wetlands would be cut by hand-held equipment (chain saws) and portions of this vegetation would be left in the wetland areas for use as wildlife habitat or removed by helicopter. No mechanical clearing

vegetation removal begins. Assistance with salvage and potential enhancement of other suitable sites if required should be discussed as appropriate mitigation.

The Stable Tree Criteria is mentioned within the document, but not specifically and stated that it will be worked on more at a later time. The survey and number of trees that will be removed in all areas should have been defined within the document. Impacts on the availability of cover for deer and elk, as well as the stability of the trees left standing should have been addressed.

A suggested source of mitigation from the Muckleshoot Cultural Resources Program would be to cultivate and maintain huckleberry patches adjacent to the existing ROW and next to the chosen alternative if it is decided to move forward with this project. Many of the plants that traditionally supported native people's of the area, including huckleberries, were destroyed or do not exist within the Watershed because of past land use practices.

Sections 3.13 and 4.12 Cultural Resources:

The discussion on cultural resources is severely lacking in substance. The DEIS acknowledges that BPA is subject to Section 106 of the National Historic Preservation Act (NHPA) for this federal undertaking. (Section 5.4, page 5-5). Under the NHPA, the agency is responsible to identify archaeological, historic and traditional cultural resources that may be directly or indirectly adversely affected by a project; and determine appropriate strategies for mitigating adverse effects. Where the Muckleshoot Tribe has traditional use and interests within the area of potential effects for an undertaking, it must be consulted throughout the Section 106 process. The DEIS acknowledges that the project is an undertaking subject to NHPA, that cultural resources including traditional cultural properties (TCP's) have a high probability of being present and affected, and that surveys are required. However, it does not discuss the area of potential effect (APE) for the undertaking, which is an important step necessary to determine the proper scope of surveys. Audio, visual, and direct effects of ground disturbance including access roads, staging areas, borrow pits, are all factors to be taken into account when defining the APE.

The DEIS states that there is a high probability of encountering prehistoric and historic cultural resources within the project area (4-95), but the proposed action states that there is a low impact on cultural resources and contains the least number of culturally sensitive areas and no cultural resource sites within the ROW. (4-96). This document was printed before most cultural resources surveys or appropriate studies, including any TCP studies involving Tribal informants, were designed or undertaken or results made available for any of the project alternatives. The statement is made, however, that the impact to cultural resources will be low for the proposed action, based upon archival research. This is not sufficient "reasonable effort" to evidence NHPA compliance or support this conclusion. The studies must be undertaken prior to making any determination of presence, significance, eligibility, or appropriate mitigation strategies.

It is troubling that BPA is willing to make this statement well before surveys or TCP studies were completed considering that the proposed action is to effect 152 acres directly within the ROW, and over half older stands that may support cultural resources and culturally modified

4

would be undertaken in wetland areas. See also response to Comment 405-001.

405-015 Impacts of the Proposed Action would occur in Douglas fir dominated stands that are 36 to 75 years of age. Due to the height of the trees, additional cutting would be needed at various locations beyond the 150-foot ROW to remove danger trees. This additional cutting would be required whenever the height of trees, in combination with the topography, location and swing of the conductor, wind direction, lean, evidence of high water table, past tree failures, overall health of the tree, etc., could represent a danger to electrical transmission line reliability. Selective danger tree cutting could occur as far away as 200 feet from the edge of the ROW, but most would occur within 75 feet from the edge of the ROW.

405-016 If the landowners agrees to planting the species and the species does not grow too tall, it could be planted under the line.

405-017 The project's Area of Potential Effects (APE) is discussed in the *Draft Cultural Resource Survey Technical Report* (Bialas 2001). It consists of a 300-foot (91-meter)-wide corridor containing the 150-foot (45.5-foot)-wide construction corridor and a 150-foot (45.5-meter)-wide danger tree removal zone. Some facilities, such as the Echo Lake Substation expansion area, extend beyond the construction corridor. Access roads and staging areas also would be used but their precise locations have not yet been defined.

405-018 The statement on page 4-96 that impact to cultural resources is expected to be low was based on a sensitivity study of the project (DeBoer 2000). The *Draft Cultural Resource Survey Technical Report* (Bialas 2001), based on an intensive survey with subsurface testing, located only two cultural resources and recommended both as not eligible for listing in the National Register of Historic Places.

BPA will continue consulting with the Muckleshoot Tribe to request the Tribe's concerns about potential project impacts and mitigation measures. We believe that the environmental analysis, including cultural and social impacts, can be completed.

trees. Nor does this acreage take into account areas of visual, auidial, and indirect effects of the project, which extend the APE. In addition, the locations of access roads has yet to be determined, and will not be available until the FEIS is published. Cultural surveys must be completed for road corridors, for stream crossings, for substation and staging areas and borrow pits, with the Tribe consulted on the locations beforehand to identify and cultural concerns. We question whether in light of these omissions, the full environmental analysis including cultural and social impacts, can be completed.

405-019 We are pleased to see BPA's commitment to work with the Tribe and to avoid sensitive areas if the proposed project is built. Such commitments would be appropriately documented in an MOA evidencing the project NHPA compliance. We feel that to provide comments concerning protection of cultural resources would be premature, as most necessary surveys and studies, including ethnohistoric or TCP studies, have not yet been undertaken or their proper scope discussed by BPA with Cultural Resource Program staff.

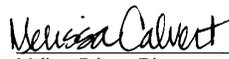
Other Matters:

405-020 The expansion of Echo Lake Substation was not mentioned as being part of the transmission line proposal during scoping meetings with the Muckleshoot Tribe. We would like to recommend that the area for expansion, as well as all access roads, stream crossings, and proposed staging areas, be surveyed for cultural resources before construction.

405-021 The Tribe has made repeated requests for BPA assistance in obtaining timber cleared from the ROW, including a written request dated 2-16-01. Additionally, a copy of the timber cruise for the proposed project was requested, and was promised to the Tribe in a letter dated 3/8/01. At this time we have not received the requested information. Please forward these documents to myself as soon as possible.

405-022 In conclusion, this DEIS seems premature and insufficient in a number of subject areas, where locations of elements of the project are not yet established or management or mitigation plans are not in place so that environmental impacts cannot be properly analyzed. At this time, we recommend the "No Action Alternative" until such a time that we may fully evaluate all the necessary studies to determine the impact to the resources within the proposed project area. Until that time, we would like to continue consultation and propose a meeting within the next month. Please call me at your earliest convenience to schedule a time with the Culture Committee and staff.

Sincerely,



Melissa Calvert, Director
Muckleshoot Wildlife and Cultural Resources Programs

405-019 BPA will be pleased to enter into a Memorandum of Agreement (MOA) regarding National Historic Preservation Act (NHPA) compliance, if continued analysis and consultation determines that the project would affect one or more National Register of Historic Places properties and avoidance or mitigation is needed. BPA looks forward to receiving any information the Muckleshoot Tribe may have on traditional cultural properties or uses of the project area.

405-020 The Proposed Action calls for construction of nine miles of transmission line and the expansion of Echo Lake Substation by approximately three acres for the purpose of constructing a new bay to accommodate the additional transmission line. BPA regrets this oversight if it was not mentioned during the scoping meeting with representatives of the Muckleshoot and Snoqualmie tribes. With respect to surveying these areas for cultural resources, BPA cultural resource contractor, HRA Inc., surveyed the substation expansion area at the time the line was surveyed during summer 2001. Although the proposed substation expansion area was surveyed, no survey was undertaken for any staging areas because they were unknown at the time. Any area where ground disturbing activities would take place would be surveyed for cultural resources before construction.

405-021 Once BPA has a timber cruise, we would be willing to share that information with the tribe.

405-022 Comment noted. BPA received many requests for more information as a result of the review of the draft EIS and decided to publish a SDEIS to respond to the comments.

Groups and Individuals

Kuehn, Ginny -KC-7

From: randy kram [rlruger44@uswest.net]
Sent: Sunday, July 08, 2001 5:13 AM
To: comment@bpa.gov
Subject: Powelines through the watershed

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: *KELT-338*
RECEIPT DATE: JUL 09 2001

338-001

I believe that the current proposal to run a new line through the watershed east of Maple Valley is the best choice. It impacts the smallest number of homes and will have little impact on the surrounding area. With the lines in the watershed there will also be greater control over the construction and future maintenance. Also, less chance of vandalism due to the fact its in a restricted area. A very good choice to help us with our energy needs.

Thank You
Randal Kram
Covington, WA

338-001 Comment noted.

Kangley-Echo Lake Transmission Line

Telephone comment by Ginny Kuehn
7/9/01

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: *KELT-339*
RECEIPT DATE: JUL 09 2001

Greg Meeks
360-886-7334

339-001 Additional information has been added to the SDEIS to address this comment. Please see Chapter 1. The purpose of the project is to meet the level of reliability that will reasonably insure that all customers in the region have electrical power available when it is needed.

339-001

Greg called regarding the Cedar River Watershed. His comment was really a bad idea. A lot of money. He would like a call back to explain the reasoning of this project.

Lou Driessen called Greg Meeks on 7/9/01. He does not want the project. He is against growth and thinks this project would promote growth. He also does not want this project to affect wildlife, including E&M field impacts. He knows that this project would only benefit California and was not concerned about local needs for they have not had a black/brown out. He was all in favor of the No Action Alternative.

Kuehn, Ginny -KC-7

From: Konigsmark, Kenneth D [Kenneth.Konigsmark@PSSBoeing.com]
 Sent: Wednesday, July 11, 2001 3:49 PM
 To: 'comment@bpa.gov'
 Subject: Kangley-Echo Lake Expansion DEIS comments

RECEIVED BY BPA
PUBLIC INVOLVEMENT
RECEIPT DATE: JUL 12 2001

Dear Mr. Driessen,

While I can't possibly adequately review all 348 pages of the DEIS, I do wish to comment on what I did read and what I know of the project's intentions.

These comments are submitted as an individual, not representing any organization, and as a resident living nearby in the Preston area. I do work for the Mountains to Sound Greenway Trust and am, thus, very familiar with the area, land use issues, and all of the intense efforts that have gone into helping conserve and protect the project area from inappropriate development and impacts.

340-001 I'm concerned immediately when I read the project "purposes" on p. 18. These reflect minimizing any impacts to humans, but do not reflect this same sentiment for impacts to the environment. While it state's "protect environmental quality," what does this mean, and how can this possibly be done with a project that would create a new 150', permanently cleared corridor through what is now valuable forestland? I believe one of your purposes should clearly state: "Minimize all environmental impacts through careful planning and implementation and fully mitigate the impacts of the new corridor."

340-002 What do I mean by "mitigate?" It's incumbent on BPA to mitigate the permanent loss of forestland that will occur as a result of your proposed project. 150' x 9 miles = 164 acres of permanently lost forestland through an area that has gone to extensive lengths specifically to preserve and protect long-term forests. In an era of salmon listings, new measures being taken to protect native vegetative cover, and heightened sensitivity to the importance of forests for wildlife habitat, water quality and quantity, recreation, scenic values, air quality and carbon sequestration, and more, it is incumbent on BPA to permanently replace the 164 acres of forest lost to clearing and "development" with an offsetting minimum of 164 acres elsewhere. This should be factored into the project costs and be accomplished via a conservation easement or fee acquisition.

340-003 While I'm pleased none of the other alternatives are proposed because of their broader environmental impacts, I'm still not satisfied with the proposal selected. Why is a parallel line necessary? Why can't the new line be added to the existing towers? The environmental "savings" would be huge if this were done, and I suspect the financial savings would be significant as well. I'm certain there are ways to temporarily keep power flowing in the existing line even while attaching a new line to the towers. If the issue is redundancy, it really wouldn't matter if the line were parallel to the existing line or on the same towers; an incident would likely affect them the same way in either case. I strongly urge you to not build a parallel line but to instead locate the new line on existing towers. Not only does this save 164 acres of forest and prevent a widened corridor, it also precludes the costly need for BPA to acquire easements, install towers, etc.

340-004 "Danger trees" is another issue of concern. In the "old days" this might have been the way things were done, but cutting down anything that MIGHT have a future impact is not acceptable today. Just as the Watershed is not allowing this approach, BPA must take a similar approach along the entire 9-mile length. An open approach to cutting all danger trees is not acceptable and this must be changed in your approach so that the "stable tree" approach is utilized everywhere.

340-005 I must mention that this portion of the I-90 corridor is a National Scenic Byway that merits special scenic and visual impact concern. Once the line crosses to the north face of Taylor Mountain it is within the viewscape of I-90 travelers, who now enjoy a forested basin view. A widened powerline corridor will likely detract from this, which presents another reason for locating the line on existing towers.

340-006 NEPA requires BPA to "protect, restore, and enhance the environment." While I didn't read the entire DEIS, I didn't see any measures that accomplish this goal. What I did see was an intent to permanently clear a 9-mile, 150' wide corridor and erect 40 towers plus a new line. Thus, I again emphasize that BPA must develop an appropriate mitigation proposal that offsets the environmental damage occurring via this loss of forestland.

Thank you for the opportunity to comment.

Ken Konigsmark
 (425) 957-5094
 FAX: (425) 957-5048

(NOTICE: Contents of this message should not be construed as representing any official position of either the Boeing Company or the Mountains to Sound Greenway Trust unless specifically stated as such)

340-001 Our reference to the "human environment" includes both the social environment as well as the natural environment, and our EIS looks at impacts to both. We do not put one above the other, but analyze all impacts in our environmental documents. With respect to what we mean by the project purpose "Maintain environmental quality," we mean that it is our intention to build, operate and maintain the proposed transmission facilities in an environmentally-responsible manner, should BPA make a decision to build the project.

340-002 Your comment regarding mitigation is noted and will be addressed in the appropriate detail in the Mitigation Action Plan to be subsequently prepared for this project, and in association with permitting discussions with the King County Department of Development and Environmental Services.

BPA has purchased 350 acres in the Raging River Basin immediately adjacent to the Cedar River Watershed. One hundred ten acres would be turned over to the city of Seattle with the remaining acreage sold with a conservation easement or deed restriction such that no commercial or residential construction could take place. BPA may also purchase or fund the purchase of other properties that could be used for compensatory mitigation. Portions that will not be turned over to the city of Seattle would be sold with a conservation easement or deed restriction such that no commercial or residential construction could take place. These properties would more than offset any impacts the project may cause to the Cedar River Watershed and its HCP and impacts to wetlands inside and outside the watershed.

In addition to this compensatory mitigation measure, BPA has designed mitigation measures into the proposed project. It has avoided impacts to jurisdictional wetlands by avoiding filling any wetlands, using a small footprint for tower footings to minimize ground disturbance, planting low-growing vegetation in forested wetlands that would be changed to shrub-scrub wetlands and planting low-growing vegetation on other disturbed ground to rehabilitate it, requiring helicopter/sky crane construction be used to minimize new road construction, and using existing access roads to the extent possible.

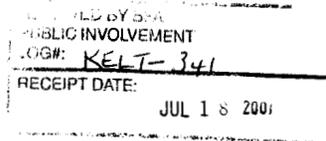
With respect to the proposed conversion of forested wetlands to scrub/shrub wetlands, BPA would only use hand clearing techniques to remove tall-growing woody vegetation, and either leave all vegetation taken in the wetland areas or would remove vegetation by use of helicopter/sky crane. Additionally, BPA would provide the appropriate level of compensatory mitigation as recommended by King County for altering these wetlands.

- 340-003 See Section 2.3.8 of the SDEIS.
- 340-004 Danger trees would be identified using a combination of information – topography, location and swing of the conductor, wind direction, lean, evidence of high water table, past tree failures, overall health of the tree, etc. See Section 2.1.1.4 of the SDEIS.
- 340-005 The proposed line would not cross the north face of the Taylor Mountain, and would not be visible to travelers on I-90. The line would terminate at Echo Lake Substation, more that a mile south of I-90.
- 340-006 Please see the response to Comment 340-002.

Philip L. Howard
Post Office Box 440
Hobart, WA 98025-0440

July 15, 2001

Mr. Gene Lynard (KECN-4)
Project Environmental Lead
Bonneville Power Administration
Post Office Box 3621
Portland, OR 97208



Dear Mr. Lynard:

Re: Kangley – Echo Lake Transmission Line Project
Specifically impact on the Gray Wolf, Black Bear, Cougar

Thank you for the copy of the Kangley – Echo Lake Transmission Line Project environmental impact study. I found the information quite enlightening and very thorough and informative.

However, as late as July 4, 2001 I have personally observed a Gray Wolf not more than 200 yards east of the present transmission lines where they cross Kerriston Road – whereas you report indicated 'No known to occur in the CRW' and 'Not expected to occur in the project area'. I would have to tell you that where I saw the wolf was pretty damn close to your project area.

341-001

Further, I did not see any listing of the Black Bear or Cougar, which also do occur within all the areas listed for your project. What information has been established for these two species?

341-002

Aside from these three species of animals I was very pleased with the extensive work done by Bonneville Power Administration, et al.

341-003

Cordially,


Philip L. Howard

Cc: Bonneville Power Administration file

341-001 Section 3.3.2 and Table 2 of the Wildlife Technical Report (Appendix B) were revised to indicate that wolves are highly mobile species and could be observed in a variety of habitats, including the project area. However, the finding that the project area does not provide suitable denning or rendezvous habitat is still accurate. BPA believes that the proposed project would have no effect on the gray wolf, a federally-listed endangered species, and the USFWS has concurred with this determination in their February 23, 2002 letter to BPA.

341-002 Section 3.3.2 of the Wildlife Technical Report (Appendix B) describes the process used to select species for inclusion in the analysis. Species included are those that are federally-listed as threatened or endangered; federal species of concern; listed by the state of Washington as threatened, endangered, sensitive, or monitor species; identified in the King County Comprehensive Plan as being of local concern; and are expected to occur on the west side of the Cascades. One additional species, the black-tailed deer, was also included as a result of comments made during public scoping for the project. Because neither black bear nor cougar fit these criteria, they were not included.

341-003 Comment noted.

Kuehn, Ginny -KC-7

From: dstolsig@juno.com
Sent: Saturday, July 28, 2001 7:39 PM
To: comment@bpa.gov
Subject: Kangley-Echo Lake New Line

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-342</i>
RECEIPT DATE: JUL 30 2001

Re: Online EIS Chapter 2.1.1.5 Access Roads

We would like to suggest that any access road leading to the South (Kangley) end of the project be placed in accordance with Figure 23, page 79, DEIS Kangley Site, Sand and Gravel Operation Proposed Rezone, May 1987. King County Department of Planning and Community Development. (Riverwood Land Co./Stoneway Concrete, Inc.)

To wit: In Section 27, Township 22N, Range 7E, WM, S/2 of NE/4 of SE/4 the new Tower Access Roads are shown to extend from 336th Ave SE (private road) NE along the Grand Coulee - Raver No. 1 & 2 line to a point 100' from our property line (description below), then running North along that 100' setback line to the Tacoma - Grand Coulee Line easement. Using this route, access to the Number 1 tower of the Kangley - Echo Lake Line could be achieved by extending that road Easterly along the North side of our property directly to the new tower and easement, thereby negating crossing our pastures with a new road and achieving the installation of the roads called for in the aforementioned DEIS. This new road would be level from 336th Ave SE to the new tower.

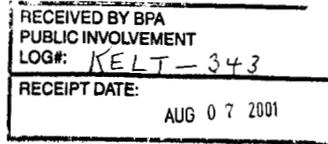
We will be unable to attend the August 1, 2001 Public Meeting at the Maple Valley Community Center, but will be happy to discuss this proposal, on site, with your planners after Aug 7, 2001.

Thank you,

Richard J. and Patricia L. Stolsig
26616 336th Ave. SE
P. O. Box 135
Ravensdale, WA 98051
SE/4 of NE/4 of SE/4, Sec 27, TWP 22 N, R 7 E, WM
(360) 886-2713
dstolsig@juno.com

342-001

342-001 The route suggested was field reviewed on two occasions. The route is not level and would require additional acquisition from private owners, and more new construction.



-----Original Message-----
From: gail vaden [mailto:xlax99_1999@yahoo.com]
Sent: Monday, August 06, 2001 4:33 PM
To: lcdriessen@bpa.gov
Subject: Kangley-Echo Lake Transmission Project

Lou Driessen, Project Manager, Bonneville Power Administration

Mr. Driessen,

The BPA is proposing construction of 9 miles of new 500 kV power transmission line to be known as Kangley-Echo Lake Transmission Project in King County. The powerline would cut through both the Raging River watershed and the Cedar River watershed (a primary source of Seattle's drinking water and is currently protected from logging.

If constructed, this line would involve clear-cutting a swath from 150' to 275' wide through the forest plus construction of 1.5 miles of new roads and three construction staging areas of undisclosed size.

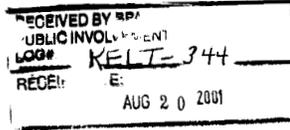
We believe the BPA should be held responsible for full mitigation for this project by replacing the habitat, including forest and wetlands, damaged or degraded by this project with equivalent habitat type and quality in the vicinity. Mitigation of damaged or degraded habitat is standard practice in other industries and the BPA should not be exempt.

Please require that the BPA fully mitigate the environmental impact of this project.

Gail and Geary Vaden

343-001

343-001 Please see the response to Comment 340-002.



-----Original Message-----

From: Michael & Donna Brathovde [mailto:mdbrathv@concentric.net]
Sent: Wednesday, August 15, 2001 10:38 AM
To: Driessen, Lou
Cc: Murray, Senator Patty Murray; Cantwell, Senator Maria; Dunn, Jennifer; Schell, Seattle Mayor Paul Schell; Sims, Ron; Flagor, Suzanne
Subject: BPA Kangley-Echo Lake Mitigation

Michael A. and Donna L. Brathovde
29009 SE Kent-Kangley Road
P. O. Box 8
Ravensdale, Washington 98051
Phone: (425) 432-3237

Lou Driessen, Project Manager
Bonneville Power Administration
P. O. Box 3621
Portland, OR 97208

Dear Sir:

The Bonneville Power Administration (BPA) is proposing construction of nine miles of new 500 kV power transmission line to be known as the Kangley-Echo Lake Transmission Project in King County, Washington. This powerline would cut through both the Raging River watershed and the

Cedar River Watershed (a primary source of the City of Seattle's drinking water and currently protected from logging).

If constructed, this line would involve clear-cutting a swath from 150' to 275' wide through the forest plus construction of 1.5 miles of new roads and three construction staging areas of undisclosed size.

We do not oppose the construction of the line but we do believe that the BPA should be held responsible for full mitigation for the environmental impact of this project by replacing the habitat, including forest and wetlands, damaged or degraded by the project with equivalent habitat type and quality in the vicinity. Mitigation of damaged or degraded habitat is standard practice in other industries and the BPA should not be exempt.

Please, require that the BPA fully mitigate the environmental impacts of this project.

Sincerely,
Michael and Donna Brathovde

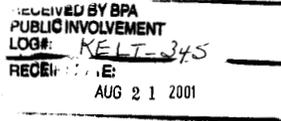
cc: Senator Patty Murray
Senator Maria Cantwell
Representative Jennifer Dunn
Seattle Mayor Paul Schell
King County Executive Ron Sims
Suzanne Flagor, Cedar River Watershed Manager

344-001 Please see the response to Comment 340-002.

344-001

Kangley-Echo Lake Transmission Line Project

Telephone comment by Ginny Kuehn
8/21/01



Bonnie Scott
Ravensdale, WA

345-001

I am calling because I am concerned about the new Kangley-Echo Lake line that you want to put in and I think you want to put it into some of the watersheds. I am just hoping that if you do that, that it will wreck a lot of habitat for wildlife and fish. I hope that you will mitigate that and find some other good habitat that you will be willing to buy or add habitat to it to make up for the loss that you will cause. Thank you very much. Goodbye.



August 17, 2001

Bonneville Power Administration
PO Box 3621
Portland, Oregon 97208

RE: Proposed Raging Cedar Powerline

346-001

Please do not authorize additional power lines in these watershed, before ascertaining a real need for additional capacity that cannot be met in other ways. If you determine that the additional capacity must be provided, then add additional circuits to the towers in the existing corridor. The public has recently acquired many of these forest lands for wildlife and water quality protection. Creating a new powerline and right-of-way will disrupt and fragment the forest and wildlife habitat and stream and water quality. Building new roads is even more damaging.

346-002

346-003

346-004

If in a few places you must take new forest land or damage wetlands, they must be replaced. A full 6 to 1 mitigation should be provided for the wetlands, as required by the Department of Ecology guidelines.

Thank you for your attention

Marcy Golde

345-001 Please see the response to Comment 340-002.

346-001 Comment noted.

346-002 Please see response to Comment 340-003.

346-003 Comment noted. We understand that the City of Seattle has acquired most of the land above Landsburg Dam within the Cedar River Watershed to protect water quality and wildlife. We also understand that the City of Seattle has "negotiated a conservation plan with the secretaries of the Interior and Commerce to minimize and mitigate any impact to endangered species while conducting otherwise lawful activities." HCP's are a long-term plan authorized under Section 10 of the Endangered Species Act (16 U.S.C. 1539). (HCP, Page 1.1-3).

As a federal agency, BPA is not subject to Section 10 of the ESA, but is subject to Section 7. BPA has initiated formal consultation with the U.S. Fish and Wildlife Service (FWS) and has concluded informal consultation with the National Marine Fisheries Service (NMFS).

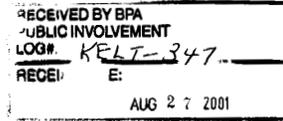
346-004 BPA tries to first avoid environmentally sensitive areas, such as wetlands, in siting its transmission facilities. Where it cannot, these areas are spanned. Where they cannot be spanned, the

impact is minimized. For the Proposed Action, BPA finds that no wetlands would need to be filled; however, approximately 14 acres of wetlands would be altered from forested wetlands to scrub/shrub wetlands.

The proposed project would change some forestland to managed grass/forb/shrub habitat, and change some forested wetlands to scrub/shrub wetlands. BPA would provide compensatory mitigation for these impacts as described in Response to Comment 340-002 above; however, such wetland mitigation would be determined by King County regulations and not the Washington State Department of Ecology. Since no wetlands would be filled as a part of the proposed action, no permit would be sought from either the Army Corps of Engineers or the Department of Ecology.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Friday, August 24, 2001 12:49 PM
To: Kuehn, Ginny -KC-7
Subject: FW: Raging Cedar Powerline DEIS



Kangley - Echo Lake
-----Original Message-----
From: Jim Chapman [mailto:jchap@gte.net]
Sent: Thursday, August 23, 2001 2:31 PM
To: lcdriessen@bpa.gov
Subject: Raging Cedar Powerline DEIS

August 23, 2001

Bonneville Power Administration
PO Box 3621
Portland, Oregon 97208

Dear Sir/Madam:

I have just learned that BPA intends to built nine miles of a new 500kV transmission line through the Cedar and Raging River watersheds in King County, Washington. This would include 1.5 miles of new road construction and a clearcut a swath from 150' to 285' wide through the forest, including Seattle's watershed, which is now protected from logging.

A Draft EIS on the transmission line is apparently available for comment.

347-001 | BPA needs to consider adding circuits to the towers in the existing corridor or explain why that is not possible.

347-002 | If a new and separate line is necessary, then any forest or wetlands that are damaged by it must be mitigated, i.e., replaced.

347-003 | A new EIS should be written which includes information needed to reach an informed decision, a substantive cumulative effects analysis and additional alternatives (including conservation).

Sincerely,

James L. Chapman
23321 75th Ave. W.
Edmonds, WA 98026

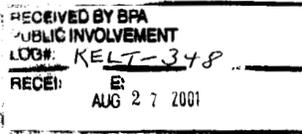
347-001 Please see the response to Comment 340-003.

347-002 Please see the response to Comment 340-002.

347-003 Please see response to Comments 411-006 and 394-090.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Friday, August 24, 2001 12:48 PM
To: Kuehn, Ginny -KC-7
Subject: FW: Transmission Project in King County



Kangley - Echo Lake
-----Original Message-----

From: Nuklldragr@aol.com [mailto:Nuklldragr@aol.com]
Sent: Saturday, August 11, 2001 9:29 AM
To: lcdriessen@bpa.gov
Subject: Transmission Project in King County

Dear Lou;

The Bonneville Power Administration (BPA) is proposing construction of nine miles of new 500 kV power transmission line to be known as the Kangley-Echo Lake Transmission Project in King County, Washington. This powerline would cut through both the Raging River watershed and the Cedar River Watershed (a primary source of the City of Seattle's drinking water and currently protected from logging).

If constructed, this line would involve clear-cutting a swath from 150' to 275' wide through the forest plus construction of 1.5 miles of new roads and three construction staging areas of undisclosed size.

We believe that the BPA should be held responsible for full mitigation for this project by replacing the habitat, including forest and wetlands, damaged or degraded by this project with equivalent habitat type and quality in the vicinity. Mitigation of damaged or degraded habitat is standard practice in other industries and the BPA should not be exempt.

Please, require that the BPA fully mitigate the environmental impacts of this project.

Sincerely,

Dave & Karin Ambur

348-001

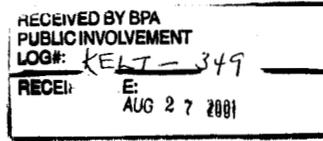
348-002

348-001 Comment noted. Please see response to Comment 340-002.

348-002 Please see response to Comment 340-002.

August 22, 2001

Lou Driessen, Project Manager
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208



Re: Raging Cedar Power Line / Kangley Eco Lake Transmission Line Project

Dear Mr. Driessen:

The Mountaineers is one the oldest and one of the largest environmental and recreation organizations in the Northwest, with about 15,000 members. We have commented on many BPA projects over the years and numerous energy projects by various agencies. The Mountaineers was very active in supporting the City of Seattle Cedar River Watershed Project and was instrumental in passage of the Cedar River HCP.

349-001

The Mountaineers has very serious reservations about the necessity of the proposed Raging Cedar Power Line and strong objections to many features of this project. In particular, we believe that the Draft EIS did not adequately consider increased energy conservation, which could negate the need for the additional power lines. The City of Seattle has a strong history of energy conservation, and other utilities in this area also have strong conservation programs. Increased energy conservation saves the individual ratepayers utility costs and could eliminate the capital cost of this project and the environmental damage that results from this project.

349-002

Further, in the event that additional transmission lines are required, we believe that BPA should take a much harder look at placing additional lines on the existing towers. BPA asserts that new transmission lines are required because of the possibility of damage to the existing towers. However, in our judgment, that possibility is negligible. Certainly the cost of reinforcing and strengthening the existing towers in various ways would be substantially less than the cost of the proposed project.

349-003

The Draft EIS does not adequately consider the very serious environmental effects from this project. The project would require 1.5 miles of new road construction through the Cedar River Watershed and the Raging River Watershed. New roads are very likely to cause soil erosion and resulting damage to water quality and fisheries resources. Additional roads also cause fragmentation and have severe impacts on wildlife in these watersheds. Although the DEIS Summary seems to infer that the roads right of way would only require clearing for about 75 feet, in fact, cutting of trees can be as far as 200 feet from the power line (DEIS pages 2-5). Further, the roads would impact several wetlands. In light of the enormous amounts of money that the City of Seattle and many state and federal agencies are spending to protect

349-001 Conservation was studied as an alternative to the transmission line. BPA is actively involved in conservation programs as noted in the EIS, but BPA plans the transmission system on the basis of the loads supplied by its customers. BPA's customers (Seattle City Light, Snohomish County PUD, Puget Sound Energy, etc.) encourage conservation and have a closer relationship to end users of electricity. At the same time, local utilities have requested transmission service from BPA sufficient to serve their expected load. BPA is obliged to maintain and construct a system that can meet those contracted needs. Conservation cannot provide the level of reliability and capacity needed. See Section 2.2.9 and Appendix J of the SDEIS.

349-002 Please see Section 2.3.8 of the SDEIS.

349-003 The proposed transmission line requires access to each tower site for the purposes of construction, maintenance and continuous operation of the line. BPA has selected the Proposed Action as its preferred alternative, in part, due to its minimal impact on the environment of all of the action alternatives under consideration. Since the Proposed Action would parallel an existing BPA 500-kV line, BPA would take advantage of an existing access road system. Because an existing access road system is already in place, BPA would need to build about 2.9 miles of additional access/spur roads to construct, operate and maintain the proposed transmission line.

Lynn Driessen, Project Manager
Page Two

wetlands and salmon habitat, this additional road construction is unwise as well as unnecessary.

349-004 Further, the DEIS does not adequately consider BPA's duty to mitigate if the project proceeds with the Preferred Alternative. Lowland forests are a critical ecological element in the Western Cascades. The Cedar River Watershed contains an unusually large block of old growth. It also contains second growth that now has the possibility of maturing into old growth as a result of the Cedar River HCP. This project, with a right of way up to 200 feet from the power line, would cause serious fragmentation through this forest ecosystem. Mitigation should include replacement habitat, including forests and wetlands, which should be in close proximity to the area that is disturbed. To the extent that local areas are not used for mitigation, the area of mitigation should be increased as the mitigation moves in distance. If mitigation is employed, the BPA should look at several close by areas in Green River, Raging River, near Selleck, and upper Rock Creek Valley.

349-005 As a further critical mitigation factor, the BPA should commit itself not to use herbicides in the Raging River Watershed, which contains important salmon runs.

We look forward to seeing these concerns addressed in the final EIS.

Sincerely,

The Mountaineers

Edward M. Henderson, Jr.
President

EMH/kle

349-004 Please see the response to Comment 340-002.

349-005 BPA has prepared a programmatic EIS for its vegetation management program associated with transmission lines, roads, and related facilities. The EIS identifies appropriate measures to protect the environment while minimizing danger tree risks and maintaining the ROW within safe, reliable conditions. These guidelines provide for protecting water resources by using herbicide buffer zones. BPA would comply with the standards and guidelines established in this EIS and the Record of Decision for vegetation management (BPA 2000). See Appendix K of the SDEIS for more information. See also response to Comment 394-193. BPA would discuss the use of herbicides with individual landowners. Herbicides would not be used in the Raging River Watershed if landowners object.

RECEIVED BY BPA
 PUBLIC INVOLVEMENT
 LOG#: KELIT-350
 RECEIVED: E: AUG 29 2001

-----Original Message-----

From: Phil Sheffer [mailto:shefferp@home.com]
Sent: Tuesday, September 04, 2001 11:34 AM
To: lcdriessen@bpa.gov
Subject: New Power lines

Dear Sir,

I am writing to express my concern about plans to build new power lines in the Cedar and Raging River Watersheds. These areas are protected for many reasons and water quality is just one of them. There are crucial wildlife habitats within these areas that must not be disturbed! The public has spoken on this issue in the past and our opinions have not changed. I urge you to add circuits to the existing towers rather than cutting down portions of the protected forests to build new towers. The construction of additional roads is a big step backwards in our work to restore the watershed to it's optimum ecological efficiency. If there are forests and wetlands that are destroyed, disturbed or damaged, they must be replaced! I would also ask for a new EIS that includes a substantive cumulative effects analysis and additional alternatives (including conservation). Thank you for your time, I hope to hear of a more ecologically sensitive alternative plan.

Sincerely,

Philip Sheffer
 3033 NE 90Th St
 Seattle, WA 98115
 shefferp@home.com

350-001 |
 350-002 |
 350-003 |

350-001 Please see the response to Comment 340-003.
 350-002 Please see the response to Comment 340-002.
 350-003 Comment noted. Please see response to Comments 411-006, 349-001, and 394-090.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Wednesday, August 29, 2001 1:30 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Please don't run power lines through watersheds!

RECEIVED BY BPA
 PUBLIC INVOLVEMENT
 LOG#: KELIT-351
 RECEIVED: E: AUG 29 2001

It said nothing other than the heading.

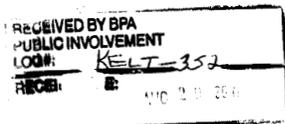
Lou

-----Original Message-----

From: Clark Nicholson [mailto:clarkn@windows.microsoft.com]
Sent: Tuesday, August 28, 2001 1:09 PM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: Please don't run power lines through watersheds!

351-001 |

351-001 Comment noted.



-----Original Message-----

From: Richard Champlin [mailto:boobooc2000@hotmail.com]
Sent: Tuesday, August 28, 2001 11:21 AM
To: lcdriessen@bpa.gov
Subject: Power lines in the Cedar River Watershed

Dear Mr. Driessen:

I received some alarming news this morning. I understand the Bonneville Power Administration is proposing to clearcut a large swath of low elevation forest in the Cedar River Watershed, which provides water for the City of Seattle, which is protected forest, and which is home to several streams and creeks in which several threatened stocks of salmon live.

352-001

I cannot be more clear: There is absolutely no reason to be building new power lines in this watershed. There are existing towers to which lines can be added. The loss of lowland forest in the State of Washington has been enormous, and the threat of extinction for several species of salmon, as well as some birds and mammals, is very real.

352-002

I strongly suggest you rethink this idea. Just because we now have a President who wholeheartedly supports the elimination of environmental regulations and concerns does not make it right. The City of Seattle has protected this watershed for a number of reasons. The majority of the citizens of King County support this protection. And as a reminder, the

352-003

President I speak of was not elected by the majority of voters. He does not have a mandate to ignore the will of the majority of citizens.

352-004

If the BPA is doing this because of what some are calling an "energy crisis", then it has been sold down the river, or indeed, it is selling the citizens of this state and BPA's own customers down the river. The "energy crisis" so often invoked by Bush and Cheney is simply a fabrication to cover the fraud perpetrated upon the energy users of this country by the suppliers of electricity, all in the name of deregulation.

352-005

Again, let me state this clearly: You must not clearcut in our watershed. I intend to express my concerns to my congressional delegation as well.

Sincerely yours,
Richard P. Champlin
22831 30th Ave. S, #204
Des Moines, Washington 98198
206-769-5097

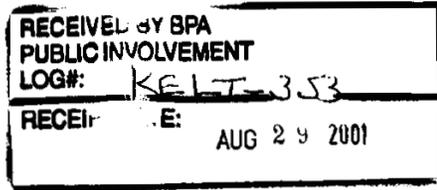
352-001 Please see the response to Comment 339-001.

352-002 Please see the response to Comment 340-003.

352-003 Comment noted.

352-004 Comment noted.

352-005 Not all trees in the ROW would be removed. Transmission towers are typically sited on higher ground, and they generally span drainages and associated riparian areas. Siting towers in this manner would increase the likelihood that the conductors may be above some riparian areas and may require only limited removal of vegetation. BPA would leave/protect low-growing vegetation where possible.



-----Original Message-----

From: Cole Thompson [mailto:wct25@yahoo.com]
 Sent: Tuesday, August 28, 2001 4:39 PM
 To: lcdriessen@bpa.gov
 Subject: power line development

Hello--

353-001

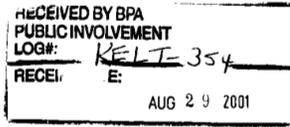
Just a quick note. Dont cut down any trees in our watersheds damn it!! I understand the need to create new power lines in a rapidly developing region- but for salmons sake, figure out a solution to cutting wide swaths through our forests. i am an avid hiker, and those cuts are saddening and i beleive unnecessary- so figure an alternative, you have the technology and the bubget. Seattle enjoys a solid source of freshwater, why take away from this vital resource.

353-002

Sincerely,
 A Concerned citizen, Seattle Resident energy user, and lover of the roadless wilds.

353-001 Please see response to Comment 352-005.

353-002 Comment noted. If BPA makes a decision to build the proposed project, it would do so in an environmentally-responsible manner. BPA would obtain all applicable environmental permits from the appropriate land management agencies and other federal agencies, such as the USFWS, before initiating construction activities.



-----Original Message-----
From: Dorothy Sager [mailto:dozsager@hotmail.com]
Sent: Tuesday, August 28, 2001 7:07 PM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject:

Attention: Mr. Lou Driessen, Project Manager

354-001

I understand providing power to Northwest users is important. I am opposed to cutting any forest to do so. I want you to focus on adding additional circuits to towers in the existing corridor instead of clearing more forest area.

354-002

Whatever the outcome of this project, I expect that any forest or wetlands that are damaged will be replaced. This is also a citizens request for a new EIS with needed information, a

354-003

substantive cumulative effects analysis and additional alternatives (including conservation).

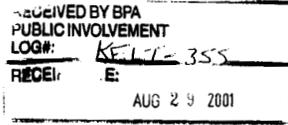
Submit comments to (before Sept. 4)

Dorothy Sager

354-001 Please see the response to Comment 340-003.

354-002 Please see the response to Comment 340-002. BPA has purchased lands adjacent to the Cedar River Watershed as compensatory mitigation for the forestland that would be taken out of production within the Cedar River Watershed. These lands could also be used as mitigation for the wetlands that would be impacted as a result of the proposed project.

354-003 Please see responses to Comments 349-001 and 350-003.



355-001 Please see responses to Comments 340-003 and 352-005.

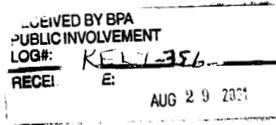
-----Original Message-----

From: Justin Birk [mailto:justinbirk@home.com]
Sent: Tuesday, August 28, 2001 4:20 PM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: new lines

355-001

I recently was informed that you are planning to put new transmission lines through the Cedar and Raging River watersheds, the same watersheds that supply Seattle with our drinking water. As I understand it, this area is protected from logging, and rightfully so. Not only would this compromise our water source, it would also place a large scar in our precious forest land. Haven't we seen enough clear-cutting from Weyerhaeuser? I do not approve of this course of action from my public utility. Please put additional lines on existing towers. Please don't destroy our forests.

Justin Birk
Green Lake



-----Original Message-----

From: Erica Kay [mailto:bf283@scn.org]
Sent: Tuesday, August 28, 2001 8:07 PM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: Comments regarding proposed logging in Cedar River Watershed to make way for power lines

Dear Lou Driessen, Project Manager,

It has come to my attention that a plan by the BPA to expand power lines would require logging and road building in the Cedar River Watershed (as well as nearby forests). 'Fraid not!

356-001

My basic comment is simple. This violates the HCP for this area which disallow any logging of this type in the watershed. As I understand the HCP to which the city of Seattle is accountable, this cannot even be considered in this protected area. As a citizen of Seattle, I demand that this project drop this idea immediately and consider legally (and ecologically) viable alternatives. No logging is legal in this watershed and the goals of the HCP are to remove roads not build new ones.

356-002

Although I don't fully understand the repercussions of adding additional circuits to the existing towers in that corridor, I suspect I could support that alternative, assuming any forest or wetland damage is mimimized and mitigated.

356-003

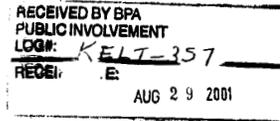
A new EIS that looks at additional alternatives and examines cumulative effects is needed.

Erica Kay
PO Box 95113
Seattle WA 98145
bf283@scn.org

356-001 The *Final Cedar River Watershed Habitat Conservation Plan for the Issuance of Permit to Allow Incidental Take of Threatened and Endangered Species (HCP)*, does not "disallow logging of this type in the Watershed," as the commenter states. On the contrary, the HCP states "Removal of trees, down or standing, will be allowed along the existing or new rights-of-way, including roads, to protect public safety and facilities and to allow access. Trees removed for such reasons may be sold by the City, as long as any net revenues are used to offset costs of the HCP or watershed management."

356-002 Comment noted. Please see the response to Comment 340-003.

356-003 Comment noted. Please see responses to Comments 349-001 and 350-003.



-----Original Message-----

From: Paul Hezel [mailto:phezel@enviroissues.com]
 Sent: Tuesday, August 28, 2001 8:46 PM
 To: 'lcdriessen@bpa.gov'; 'coment@bpa.gov'
 Cc: Paul Hezel
 Subject: Raging Cedar Powerline project

Dear Lou -

357-001 Please include this letter with comments that do NOT support continuing with the Cedar River Watershed powerline project as stated in the DEIS. New powerlines should be added to the existing transmission towers, not along new towers through the watershed. Too much work went into protecting the Cedar River Watershed to have it hacked again by a linear project. It would do much to destroy the contiguous block of old growth habitat that exists there currently.

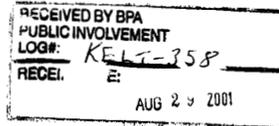
357-003 Write a new EIS. Include a conservation alternative. Evaluate more seriously the cumulative effects, including that of fragmenting habitat and introduction of edge effect into old growth forest habitat, and potential habitat destruction at the river crossing.

357-005 If you find a way to go through with the project: ALL forest cut for the project should be replaced at a ration of 10:1, which may include

purchase of Cascade Conservation Partnership lands at the same ratio.

Thanks.

Paul Hezel
 5521 Brooklyn Ave NE
 Seattle WA 98105
 206-729-8429



-----Original Message-----

From: dea@u.washington.edu [mailto:dea@u.washington.edu]
 Sent: Wednesday, August 29, 2001 12:24 AM
 To: lcdriessen@bpa.gov
 Subject: Bonneville Power to clearcut Seattle's source of drinking water - the Cedar River Watershed!

I do not want Boneevile Power to destroy the city's protected water shed

358-001 with power lines. Destroying a natural resource like water sheds is an unsustainable prospect for human interest. Bonneville should use current cut paths from other power lines rather than mow down new ones.
 -David A

357-001 Please see the response to Comment 340-003.

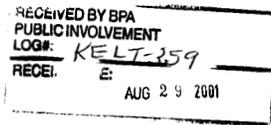
357-002 As described in Section 3.4 of the Vegetation Technical Report (Appendix C) of the EIS, the proposed transmission line ROW does not pass through old growth forest.

357-003 Comment noted. Please see response to Comments 411-006, 349-001, and 394-090.

357-004 Analysis of potential impacts from habitat fragmentation within the Cedar River Watershed was expanded in Section 4.1.1.1 of the Wildlife Technical Report (Appendix B). No old-growth forest habitat would be affected.

357-005 Comment noted. BPA has purchased land to be used as compensatory mitigation, to partially mitigate for the forestlands and wetlands that would be impacted by the proposed project. See response to Comment 340-002.

358-001 Please see the response to Comment 340-003.



-----Original Message-----

From: Colwell, David G [mailto:david.g.colwell@Boeing.com]
Sent: Wednesday, August 29, 2001 7:15 AM
To: 'lcdriessen@bpa.gov'; 'coment@bpa.gov'
Subject: Raging Cedar Powerline

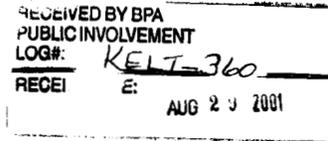
Dear Mr Driessen,

359-001

359-002

I deplore the proposed Raging Cedar Powerline because I am a resident of Seattle and don't want my watershed trashed by road building and tree cutting. Why cannot additional powerlines be hung on existing towers? You would not propose a construction of a new powerline through Mt Rainier National Park. Why do you propose construction in Seattle's protected watershed. It is clear from the DEIS that the BPA does not regard the loss of lowland forest as significant, but lowland forest is already disappearing fast enough. We don't need to lose more.

David G Colwell
Boeing SSG Facilities Services - Strategic Planning
*206-544-7457 (phone)
*206-797-4059 (pager)
*206-544-5889 (fax)
*M/C 2R-71 (mailcode)
*david.g.colwell@boeing.com (email)
C15-20 Building, South Park, Seattle, WA (location)



-----Original Message-----

From: Paul Ballard [mailto:pballard@oz.net]
Sent: Wednesday, August 29, 2001 8:26 AM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: Bonneville Power Plan to Clearcut in the Cedar River Watershed!

Lou Driessen, Project Manager

360-001

360-002

360-003

360-004

Regarding the Bonneville Power Administration (BPA) plan to build nine miles of new 500 kilovolt line through the Cedar and Raging River watersheds. I support, instead, adding additional circuits to towers in the existing corridor. If there is any cutting, I insist that any forest or wetlands that are damaged be replaced. There are apparently discrepancies, including the amount of forest to be cut especially around old growth. I would ask for a new EIS with needed information, a substantive cumulative effects analysis and additional alternatives. This should of course include conservation.

Sincerely,

Paul Ballard
416 NW 92nd
Seattle, WA 98117
206 782 0924

359-001 Please see the response to Comment 340-003.

359-002 Comment noted.

360-001 Please see the response to Comment 340-003.

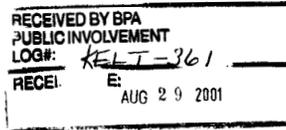
360-002 See response to Comment 357-004.

360-003 The Proposed Action would not require cutting any old growth on the Cedar River Watershed, or anywhere within the project area.

360-004 Comment noted. See response to Comment 357-003.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Wednesday, August 29, 2001 3:29 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: NINE MILES OF NEW TRANSMISSION LINES



-----Original Message-----

From: Stacey Glenewinkel [mailto:STACEY32@worldshare.net]
Sent: Wednesday, August 29, 2001 11:07 AM
To: lcdriessen@bpa.gov
Subject: NINE MILES OF NEW TRANSMISSION LINES

361-001 | I am deeply disturbed about your plans to build nine miles of new 500kilovolt line through the Cedar and Raging River watersheds and your 1.5 miles of new road construction. Why do you think it's ok to clearcut a swath from 150' to 285' wide through the forest, including Seattle's watershed, which is currently protected from logging?? This plan would destroy forests recently protected by the City of Seattle and Protect Our Watershed Alliance. Why have you dismissed alternatives that would modify existing powerlines, eliminating the forest destruction? There are important salmon fisheries in Raging River and the City of Seattle is working to re-establish salmon in Cedar River.

361-002 | BPA feels the loss of forest is not large or important. Apparently you don't understand the importance of these low elevation forests, the rapid loss of forest in the county, and the landmark decision by Seattle to preserve its watershed forests. Would BPA propose a powerline through Mt. Rainier National Park? Then why through our protected watershed?

361-003 | BPA needs to any new lines on the existing towers. In any alternative, BPA must fully mitigate for any impacts of their projects. And that means REPLACING any forests that they cut.

361-004 | Please add additional circuits to towers in the existing corridor. I INSIST that any forest or wetlands that are damaged be replaced. I also ask for a new EIS with needed information, a substantive cumulative effects analysis and additional alternatives (including conservation).

Be responsible!!
Stacey Glenewinkel

361-001 Please see the response to Comment 340-003.

361-002 Comment noted.

361-003 Please see the response to Comment 340-002.

361-004 Please see responses to Comments 349-001, 350-003, and 357-005.

Kuehn, Ginny -KC-7

From: Richard Ellison [saveetree@uswest.net]
Sent: Thursday, August 30, 2001 12:26 AM
To: comment@bpa.gov; lcdriessen@bpa.gov; michael@pobp.org
Subject: Kangley-Echo Lake Transmission Line Project DEIS

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#:
RECEIVED
AUG 30 2001

August 30, 2001

362-001

I am writing in regard to the Draft Environmental Impact Statement (DEIS) on the Raging Cedar Powerline, also known as the Kangley-Echo Lake Transmission Line Project. I strongly oppose the cutting any forest areas, especially in the protected Cedar River Watershed, nor the destruction of any wetlands in the construction process. Any and all wetlands and forests impacted must be mitigated.

362-002

Long term and cumulative impacts from the project must be evaluated, including impacts to amphibian populations and state sensitive plant and animal species. Species like Tall Bugbane, *Cicimifuga elata*, are state sensitive species that are only found in lowland old growth and late successional forests. This species is likely extinct in King County and has few know populations in Washington State. Lowland old growth and late successional forests are becoming rarer, and must be protected from all possible developments and disturbance. Many species that are not listed as endangered are still threatened by habitat fragmentation.

362-003

Alternative proposals must be evaluated in a new EIS, including options to modify existing towers or corridors to handle new power needs.

Thank you,

Richard Ellison, Save Seattle's Trees!
1938 10th Ave E
Seattle, WA 98102

362-001 Comment noted.

362-002 Please see response to Comment 394-090 for additional information on cumulative effects analysis.

As a part of this analysis for the SDEIS, BPA identified the potential effects on federally-listed threatened and endangered species, species of concern, and Washington State-listed threatened and endangered, and sensitive and monitor species with the potential to occur on the west side of the Cascades. Tall Bugbane was included in the analysis.

362-003 Please see the response to Comment 340-003.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Wednesday, August 29, 2001 4:36 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Logging, Kangley - Echo Lake

RECEIVED BY DPA
PUBLIC INVOLVEMENT
LOG#: KELT-363
RECEIVED: AUG 30 2001

-----Original Message-----

From: Paul Waggoner [mailto:pwags@truth.com]
Sent: Wednesday, August 29, 2001 3:57 PM
To: 'lcdriessen@bpa.gov'
Cc: 'coment@bpa.gov'
Subject: Logging

Hallelujah !!

I happened to hear there is going to be some logging on the Cedar River Watershed - and I am delighted. ..Especially if it is old-growth.

Congratulations on your stewardship of a renewable natural resource.

Please continue to manage the forests, which certainly includes logging, and clearcutting is fine. Without it and the full sunlight to which it gives rise, Douglas-fir will not regenerate, and as you know, we'll end up with a lesser species, such as hemlock.

Please, do not cave-in to the vocal folks who think preservation is proper management.

We need the timber / lumber. We need the related jobs in the beleaguered timber industry. The forest needs the logging to harvest the trees that otherwise are destined to fall down and rot. The understory need the removal of the fuel that encourages catastrophic fire, and we need some roads for access for management and fire protection.

Regards,

Paul R. Waggoner
13802 SE 52nd Pl
Bellevue, WA 98006

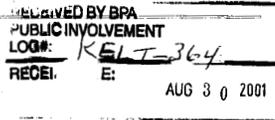
425 / 644-1221
pwags@truth.com

363-001

363-001 Comment noted.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Wednesday, August 29, 2001 4:34 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Comment, Kangley - Echo Lake



364-001 Please see responses to Comment Letter 361.

-----Original Message-----

From: Zarah Kushner [mailto:zkushner@quorum-irb.com]
Sent: Wednesday, August 29, 2001 4:02 PM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: Comment

Dear Mr. Driessen, Project Manager,

I am recently heard about your plans to build nine miles of new 500kilovolt line through the Cedar and Raging River watersheds and your 1.5 miles of new road construction. I think it is reprehensible to clearcut a space from 150' to 285' wide through the forest, in Seattle's watershed, which is currently protected from logging, yes? This plan would destroy forests recently protected by the City of Seattle and Protect Our Watershed Alliance, a most progressive decision. Why have you dismissed alternatives that would modify existing powelines, eliminating the forest destruction? There are important salmon fisheries in Raging River and the City of Seattle is working to re-establish salmon in Cedar River. BPA feels the loss of forest is not large or important. Apparently you don't understand the importance of these low elevation forests, the rapid loss of forest in the county, and the landmark decision by Seattle to preserve its watershed forests. Would BPA propose a powerline through Mt. Rainier National Park? Then why through our protected watershed? BPA needs to any new lines on the existing towers. In any alternative, BPA must fully mitigate for any impacts of their projects. And that means REPLACING any forests that they cut. Please add additional circuits to towers in the existing corridor. I INSIST that any forest or wetlands that are damaged be replaced. I also ask for a new DEIS with needed information, a substantive cumulative effects analysis and additional alternatives (including conservation). Be responsible!

Thank you for listening. I hope that my words find ears that are more focused on the environmental consequences of actions to be carried out by a company than turning a profit.

Zarah Kushner, Concerned citizen against the plans that have been set into motion by BPA.

Zarah Kushner
Associate Project Manager
Quorum Review IRB
zkushner@quorum-irb.com
<http://www.quorum-irb.com>
(V) 206-448-4082
(F) 206-448-4193

364-001

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, August 30, 2001 11:52 AM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: cedar & raging river watersheds

RECEIVED BY BPA PUBLIC INVOLVEMENT	
LOG#:	KELT-365
RECEI:	E:
AUG 30 2001	

-----Original Message-----

From: jade deyo [mailto:jjdeyo@yahoo.com]
 Sent: Wednesday, August 29, 2001 1:36 PM
 To: coment@bpa.gov; lcdriessen@bpa.gov
 Subject: cedar & raging river watersheds

dear bpa,

i have been a citizen of washington state for my entire life (going on 30 years now) and i have been living in seattle for the last five years. i've been to many of the other states in our great union, but none compare to the vast beauty of our state, washington.

365-001

i am writing to urge you to reconsider your stance on adding additional equipment to the cedar and raging river watersheds. i, along with many others, feel that adding additional circuits to the towers already standing would be more environmentally friendly than to tear up a large portion of the watersheds to add new equipment.

365-002

in addition i encourage you to be sure to thoroughly replace any wetlands or forest that have been or may be damaged by bpa.

365-003

i understand that you must satisfy the needs of many here in washington state, i just ask that you please take into account our environment as well. as the population of our state grows we need to take steps to ensure that protected (and non-protected) portions of our forest and wetlands don't suffer the consequences.

thank you for listening.

sincerely,
 jade deyo
 seattle, washington

365-001 Please see the response to Comment 340-003.

365-002 Comment noted. Please see response to Comment 340-002.

365-003 Comment noted. BPA is siting the needed facilities to minimize the impacts on the environment, while meeting the project's purposes and need.



Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, August 30, 2001 11:42 AM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Raging Cedar Powerline project, Kangley - Echo Lake

-----Original Message-----
From: Paul Hezel [mailto:phezel@enviroissues.com]
Sent: Wednesday, August 29, 2001 6:36 PM
To: 'Driessen, Laurens C - TNP-3 '
Subject: RE: Raging Cedar Powerline project

Lou -

366-001 | So what if you shared the magnitude transmitted over several different routes? Say you shared it on three routes - if you lost one, you would only lose 1/3 of the added power that this new project will be carrying. That wouldn't be so bad, would it?

366-002 | Since I think some of the proposed cut areas are in very old growth forest, won't you have to cut a wider swath than the normal 75' ROW, to account for the larger trees in close proximity? That will not be good. How wide with the cut be at it's maximum?

366-003 | What if you combined conservation with the above sharing on current lines. Have you realistically looked at that? I can't imagine that the pricing on that combination would be more than this entirely new project.

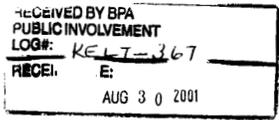
Looking forward to your reply. Thanks,

Paul

- 366-001 Increasing the number of routes and building additional lines would increase the environmental impacts.
- 366-002 Please see response to Comment 394-034 and Section 2.1.1.4 of the SDEIS.
- 366-003 Please see response to Comment 349-001.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, August 30, 2001 12:02 PM
To: Kuehn, Ginny -KC-7
Cc: Lynam, Gene P - KEC-4
Subject: FW: Clearcutting Seattle's drinking water source



-----Original Message-----

From: earlybyrd@earthlink.net [mailto:earlybyrd@earthlink.net]
Sent: Wednesday, August 29, 2001 9:23 PM
To: lcdriessen@bpa.gov
Subject: Clearcutting Seattle's drinking water source

Dear Mr. Driessen,

I recently learned of the intention of the Bonneville Power Administration to build a new 500 kilovolt line through the Cedar and Raging River watersheds that are protected by the City of Seattle and Protect Our Watershed Alliance. Wetlands and salmon fisheries that the City of Seattle is trying to re-establish in the Cedar River would be impacted by this action. Your intention to clearcut through nine miles of forests in order to complete this project is unacceptable and shows no regard for the work that has been done to preserve these areas and their ecosystems.

367-001

You must find alternatives, particularly modifying the existing power structures to accommodate additional capacity instead of destroying valuable forests and compromising the Seattle watershed. In spite of the opinion of the BPA that the destruction of this swath of forest is inconsequential, there are many of us who strongly disagree.

I am frankly appalled that your plan is being seriously considered, and I strongly urge you to add additional circuits to the towers in the existing corridor. You should be held accountable for any decision that adversely affects the forest, wetlands and salmon, as well as the Seattle watershed. These issues are of extreme importance to many people who are responsible stewards of the environment. It is imperative that a new EIS with crucial and needed information including a cumulative effects analysis and additional alternatives (including conservation), be investigated and proposed.

367-002

367-003

Please act responsibly and with regard for the land, the trees, the salmon and most certainly the people of Seattle!

Barbara Glenewinkel

367-001 Comment noted.

367-002 Please see the response to Comment 340-003.

367-003 Please see response to Comment 349-001.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-368
RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-369
RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-369

From: Roy D. Goodman [ROYGOODMAN@compuserve.com]
Sent: Friday, August 31, 2001 8:32 AM
To: Lou Driessen; Lou Driessen; Lou Driessen
Subject: Comment on Draft EIS on the Kangley-Echo Lake Transmission Line Project

August 30, 2001

Lou Driessen, Project Manager
 Communications
 Bonneville Power Administration - KC-7
 PO Box 12999
 Portland, OR 97212

RE: Draft EIS on the Kangley-Echo Lake Transmission Line Project

Dear Mr. Driessen,

368-001

I am appalled that the Bonneville Power Administration might build new powerlines through the Cedar River Watershed. We citizens of Seattle worked long and hard over the past years to protect this watershed from any further development or unnecessary roadbuilding/treecutting/ecological destruction. Last year the Seattle City Council enacted a 50 year Habitat Conservation Plan to protect this fragile watershed. The BPA's plan to build new roads and clearcut a swath through the forest within and surrounding this watershed is an affront on the citizens of Seattle, and a threat to this protected environment.

368-002

I hereby request that, instead of all this new construction/destruction, that the BPA add additional circuits to already existing transmission line towers. Even if this results in a greater cost to be passed on to us consumers, it is still a preferable alternative. Additional alternatives, including conservation, must be considered.

368-003

Do not damage our forests. Do not destroy our wetlands. Do not compromise our watershed and its surroundings.

Thank you for acting to protect and preserve our watershed, not do it any harm.

Roy D. Goodman
 4614 Linden Ave. N., #Upper
 Seattle, WA 98103
 phone: 206-633-5734
 roygoodman@compuserve.com

Kangley-Echo Lake Transmission

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-369
RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-369
RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-369

Telephone comment by Ginny Kuehn
 8/31/01

Harold Wiren
 4250 NE 88th Street
 Seattle, WA 98115

368-001 BPA understands that the City of Seattle has recently adopted a HCP in compliance with the Endangered Species Act. BPA expects to minimize any impacts to the environment in constructing, operating and maintaining the facilities over the life of the project. Please see response to Comment 340-002.

368-002 Please see the response to Comment 340-003.

368-003 Comment noted. Should BPA make a decision to build the project, it would do so in an environmentally-responsible manner. BPA understands the sensitivity of the Cedar River Watershed and adjoining lands, and intends to do what it can to protect and preserve the municipal watershed and not cause any harm, should a decision be made to site the facilities through the Watershed.

369-001 Please see the response to Comment 340-003.

369-002 Although the Cedar River Watershed is owned by the Seattle Public Utilities, it is located in unincorporated King County. The environmental regulations that govern the environmentally sensitive areas, such as wetlands, within the Watershed are the King County Sensitive Areas Ordinance, and state and federal regulations. BPA intends to comply with all applicable federal, state and local environmental laws and regulations to the extent practicable.

2-145

369-001

1. Modify the existing power lines to accommodate the new ones.

369-002

2. New power lines are in a wetland area and are protected by the City of Seattle.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C -TNP-3
Sent: Friday, August 31, 2001 11:36 AM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Cedar River power line.Kangley - Echo Lake

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-370
RECEIVED:
E:
AUG 31 2001

-----Original Message-----

From: Arthur Mink [mailto:mink3@jps.net]
Sent: Thursday, August 30, 2001 9:22 AM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: Cedar River power line.

Mr. Lou Driessen, Project Manager
Raging Cedar Powerline also known as the Kangley-Echo Lake Transmission
Line
Project.

Dear Mr. Driessen:

We understand that BPA plans to clear cut a swath from 150' to 285' wide
through Seattle's watershed, which is currently protected from logging.
This
plan would destroy forests recently protected by the City of Seattle and
Protect Our Watershed Alliance. BPA apparently has dismissed
alternatives
that would modify existing power lines, eliminating the forest
destruction.

BPA apparently does not understand the importance of these low elevation
forests, the rapid loss of forest in the county, and the landmark
decision
by Seattle to preserve its watershed forests.

Would BPA propose a power line through Mt. Rainier National Park? Then
why
through our protected watershed?

We support adding additional circuits to towers in the existing
corridor.

We insist that any forest or wetlands that are damaged be replaced.

We want a new EIS with needed information, a substantive cumulative
effects
analysis and additional alternatives (including conservation).

Sincerely,

*
Arthur R. Mink
*
Lynn Mink
169 Power Ave.
Seattle, WA 98122-6545

370-001

370-001 Please see responses to Comment Letter 361.

Kuehn, Ginny -KC-7

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KE LT-371
RECEIVED: SEP 04 2001

From: L Brenner [brennerl@hotmail.com]
Sent: Monday, September 03, 2001 12:45 PM
To: lcdriessen@bpa.gov
Subject: Cedar & Raging River Watersheds

371-001

I am writing as a former citizen of Seattle (I currently live in Amsterdam) to say that it is heartbreaking that once again something is being proposed that will cause unneeded damage to the amazing country of the Pacific Northwest. I want to support the idea of adding circuits to existing towers in the existng corridor. I want ot insist that all damage to forest and wetland be repaired. I want to ask that a new EIS be filed.

371-002

We cannot ever estimate the damage actions like the proposed one will do. We can estimate what we can STOP from happening. Please take preventative action NOW

371-003

Thank you

Lise Brenner
 Zocherstraat 38hs
 1054 LZ Amsterdam

Kuehn, Ginny -KC-7

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KE LT-372
RECEIVED: SEP 04 2001

From: Driessen, Laurens C - TNP-3
Sent: Monday, September 03, 2001 9:10 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: <no subject>, Kangley - Echo Lake

-----Original Message-----

From: Midge Brenner [mailto:midgeb@u.washington.edu]
Sent: Monday, September 03, 2001 2:11 PM
To: lcdriessen@bpa.gov
Subject: <no subject>

To: Lou Driessen, Project Manager
 Bonneville Power Administration

Dear Mr. Driessen:

372-001

I have just learned--with alarm--that Bonneville Power Administration has plans to cut old-growth forest, to clearcut a new corridor within the Cedar River Watershed for its new Kangley-Echo Lake Transmission Line Project. This would impact several wetlands and important salmon fisheries in Raging River, as well as the work being done by the city of Seattle to re-establish salmon in the Cedar River.

I am writing to urge the BPA to stop this planning immediately. Instead, the BPA could improve the existing corridor by adding additional circuits to the towers already there. If any forest or wetlands outside the existing corridor are to be damaged, they should be replaced. But before any action by the BPA, a new Environmental Impact Statement is needed. This should include all necessary information that presents alternatives including conservation, and that provides a substantial cumulative effects analysis.

Please respect the importance to all of us of preserving low elevation forests, particularly Seattle's watershed forests.

Sincerely,
 Midge Brenner
 2020 - 23rd Avenue E.
 Seattle, WA 98112

371-001 Please see the response to Comment 340-003.

371-002 Comment noted. BPA intends to minimize the impacts to the environment, should a decision be made to build the project. Please see response to Comment 357-003.

371-003 Comment noted.

372-001 Please see responses to Comment Letter 361.

Kuehn, Ginny -KC-7

From: Doug Schuler [douglas@scn.org]
Sent: Monday, September 03, 2001 10:13 AM
To: comment@bpa.gov, ldrriessen@bpa.gov
Subject: Bonneville Power clearcuts

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KE 17-373
RECEI E:
SEP 04 2001

Lou Driessen, Project Manager
Bonneville Power Administration
Portland, Oregon

Dear Mr. Dreissen:

373-001

373-002

I am deeply concerned about the clearcut that the Bonneville Power Administration proposes to make within the Cedar River Watershed. Instead, why not improve the existing corridor? Bonneville could add additional circuits to the towers in the present corridor instead of clearcutting for a new corridor. In any case, an Environmental Impact Statement that includes conservation options is absolutely essential.

Sincerely,

Doug Schuler and Terry Frankel
Seattle

Kuehn, Ginny -KC-7

From: Tracy Jenkins [tjenkins@pol.net]
Sent: Friday, August 31, 2001 11:27 AM
To: ldrriessen@bpa.gov
Cc: comment@bpa.gov
Subject: Raging Cedar Powerline

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KE 17-374
RECEI E:
SEP 04 2001

374-001

374-002

374-003

As a resident of the Northwest who lives here for the majesty and beauty of its forests, I am concerned about the casual and rapid destruction of the few remaining wildlands. The cedar river watershed is protected from logging by public request. Because the decision to damage ancient forests and wetlands is irreversible, and there is so little of the original forest left to protect, we need to go to great lengths to protect the remaining forests and wetlands. This is a priority that the public has already supported. PLEASE consider adding circuits to the existing power lines. If additional lines are necessary please minimize the width of destructive clearcut, and please replace lands impacted by the construction. The current EIS does not adequately address cumulative effects and alternatives to new lines. Please commission a new EIS with alternatives and long term cumulative effects addressed. These are critical decisions for the long term health and beauty of our northwest ecosystem. Let's not make them hastily.

Sincerely,
Tracy Jenkins, MD
3110 NW 75th St.
Seattle, WA 98117

373-001 Please see the response to Comment 340-003.

373-002 Please see response to Comment 349-001.

374-001 Please see the response to Comment 340-003.

374-002 Comment noted.

374-003 Comment noted. BPA designs its facilities to have an economic life of approximately 50 years. It does not make hasty decisions in siting transmission facilities. As a federal agency, BPA is subject to the National Environmental Policy Act (NEPA) of 1969, as amended. NEPA requires that BPA undertake an environmental impact statement on all major federal actions prior to making its decisions.

Over the last three years, BPA has made a concerted effort to work with the potentially-affected public and involved government agencies to find alternatives for the proposed power line and related facilities, including undertaking this environmental impact statement. BPA is committed to complying with the letter and the intent of NEPA in identifying all of the environmental impacts the proposal would cause, in advance of the decision-maker making an informed decision. If a decision is made to build a transmission line, then those impacts would be minimized to the maximum extent practicable. See response to Comment 340-002.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT
LOG#: <i>KELT-375</i>
RECEIPT DATE: SEP 04 2001

From: Megan Kelso [megan@girhero.com]
Sent: Sunday, September 02, 2001 6:02 PM
To: lcdriessen@bpa.gov
Subject: new BPA powerlines

375-001

Dear Mr. Dreissen,
 I'm writing to ask that you reconsider the new powerline corridor you are planning that will cut through the Cedar and Raging River watersheds. This would cause significant and adverse environmental impact to fragile and valuable and PROTECTED forests and wetlands. Please consider adding additional circuits to towers in the already existing corridor. I don't believe your EIS provides enough information about the cumulative effects of this new corridor, nor does it propose any viable alternatives. I think there should be a new EIS which provides this information. As a citizen of Washington state, I care deeply about our environment and saving the salmon and old growth forest. We all need to try really hard to think in the long term about how to save these resources. I appreciate your consideration of this matter.

thanks
 Megan Kelso
 citizen member of Pacific Crest Biodiversity Project

375-001 Please see responses to Comment Letter 361.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT
LOG#: <i>KELT-376</i>
RECEIPT DATE: SEP 04 2001

From: Judy Lightfoot [jlight@u.washington.edu]
Sent: Monday, September 03, 2001 9:41 AM
To: lcdriessen@bpa.gov; comment@bpa.gov
Subject: Proposed BPA clearcut



Card for Judy Lightfoot

376-001

376-002

Dear Mr. Dreissen,
 I am deeply concerned about the clearcut that the Bonneville Power Administration proposes to make within protected watersheds. Instead, why not improve the existing corridor? Bonneville could add additional circuits to the towers in the present corridor instead of clearcutting for a new one. In any case, before permitting BPA to act, demand a new Environmental Impact Statement that includes all necessary information (the present one is insufficient), that presents alternatives including conservation, and that provides a substantial cumulative effects analysis. Finally, BPA should be made responsible for replacing any forest or wetlands that are damaged in the course of this new work.
 Sincerely,
 Judy Lightfoot, PhD

376-001 Please see the response to Comment 340-003.

376-002 Please see responses to Comments 340-002, 349-001 and 357-003.

Kuehn, Ginny -KC-7

From: Bruce Pringle [pringb@compuserve.com]
Sent: Monday, September 03, 2001 10:44 AM
To: Lou Driessen; Communications
Subject: Comment on DEIS on the Raging Cedar Powerline

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: K E L T - 377
RECEIPT DATE: SEP 04 2001

Lou Driessen, Project Manager
Bonneville Power Administration - KC-7
Portland, Oregon

Subject: Comment on Draft Environmental Impact Statement on Raging Cedar Powerline

Dear Project Manager Driessen:

The Cedar River watershed has been given protection from logging, since it is important in protecting the city water supply. The proposed new powerline in the Cedar River and Raging River areas will remove trees and undergrowth from areas as far as 200 feet from the towers. Disturbing these valuable forests will damage wetlands and interfere with salmon habitat.

377-001

The current Environmental Impact Statement does not give adequate consideration to the possibility of using existing corridors for the new lines. It does not consider the cumulative effect over time of the proposed project. It does not provide for replacing damaged forests and wetlands.

377-002

We have already lost most of our wild areas. Please do more to protect this one.

Sincerely,

Bruce Pringle
17037 12th Place SW
Normandy Park, WA 98166

377-001 BPA has proposed siting the transmission facilities (towers and access/spur roads) to avoid sensitive areas such as wetlands, and their buffer areas. Where these sensitive areas could not be avoided, we have attempted to minimize their impact. No wetlands would be filled, but about 14 acres of non-jurisdictional wetlands would be converted from forested wetlands to scrub/shrub wetlands.

Additionally, BPA intends to purchase or fund the purchase of additional land that could be used for compensatory mitigation to mitigate for the damage done to sensitive areas, should BPA make a decision to build the project. See response to Comment 340-002. BPA intends to comply with all federal, state and local regulations with respect to the proposed project, and minimize impacts to wetlands.

BPA has concluded consultation with the National Marine Fisheries Service under Section 7 of the Endangered Species Act. We have prepared a biological assessment (BA) and have concluded that the Proposed Action would not result in destruction or adverse modification of designated critical habitat. We asked NMFS for their concurrence in this finding, and received their concurrence in early February 2002. Please see Appendix U.

377-002 Please see responses to Comments 340-002, 349-001 and 357-003.

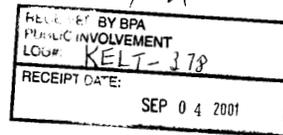
Harry Romberg
11538 17th Ave. N.E.
Seattle, WA 98125-5112

*In follow-up to my
e-mailed comments*

HR

September 3, 2001

Mr. Lou Driessen
Project Manager
Bonneville Power Administration
PO Box 3621
Portland, OR 97208



Dear Mr. Driessen:

I am a lifetime 50+ year resident of the Puget Sound region and 33 year resident of Seattle. I commented extensively both orally and in writing on the Habitat Conservation Plan for the Cedar River Watershed and was deeply involved in what I believe to have been an incredible outcome, the full protection of the watershed. I am deeply disturbed by the current proposal known as the Kangley-Echo Lake Transmission Line Project and would thus like to comment.

378-001

I oppose the project as it currently is proposed and think that it must either be significantly modified or terminated altogether. As I'm assuming the latter option is not your preferred course of action, I urge the BPA to amend the current proposal to make it more environmentally responsible. The City of Seattle had remarkable foresight in deciding to protect the watershed as fully as it did and gave up a great deal in the way of profit and the offsetting of operating costs in doing so. This transmission project diminishes that decision and threatens some of the environmental benefits sought in deciding on such a progressive HCP.

378-002

I have very serious reservations about the necessity of the proposed Kangley-Echo Lake Transmission Line and strong objections to many features of this project. In particular, I believe that the Draft EIS did not adequately consider increased energy conservation, which could negate the need for the additional power lines. The City of Seattle has a strong history of energy conservation, and other utilities in this area also have strong conservation programs. Increased energy conservation saves the individual ratepayers utility costs and could eliminate the capital cost of this project and the environmental damage that will result. Whereas conservation may not be adequate to meet all of the long range energy needs of the region, it certainly plays an important role and cannot be ignored in any comprehensive view of local energy needs and solutions. It should therefore not be overlooked when determining the needs and indeed the need for this project.

378-003

I am deeply concerned by the increased swath of forest that must be cut for the transmission lines and the necessity to build roads to accommodate it. BPA contends that the impact on the forest would be negligible but I would argue that it is considerable. While Seattle is working hard to provide excellent low elevation habitat in the area and diminish road capacity within the watershed, this project does just the opposite. Not only do roads, staging areas, harvesting of trees and other construction activities impact the boreal habitat but they affect the very reason for the existence of a protected watershed; that is, providing high quality water to the local population, oddly enough the same people for which you wish to provide additional transmission capacity. I think that in this case the higher quality water is more important than the added electricity.

378-004

BPA should be viewing this project with the goal of not compromising the Cedar River Watershed HCP as is the current case. In the event that additional transmission lines are required, I believe that BPA should take a much harder look at placing additional lines on the existing towers or accommodating them in some way in the existing corridor. BPA asserts that new transmission lines are required because of the possibility of damage to the existing towers. However, in my opinion, that possibility is negligible. Certainly the cost of reinforcing and strengthening the existing towers in various ways would be substantially less than the cost of the proposed project. In addition, accommodating the new lines in the existing corridor would likely reduce the number and size or even eliminate the need for the currently planned construction staging areas which would further impact the watershed

378-001 Comment noted. BPA has selected its Proposed Action based on a number of factors, including electrical performance, cost, and level of impact to the human and the natural environment. Table 2-3 of the SDEIS compares the impacts among alternatives. The Proposed Action is less likely to impact cultural resources, would have the least line losses, and is one the most economical of the alternatives analyzed in the SDEIS.

BPA has agreed to a long list of mitigation measures to diminish the impact of the Proposed Action in the Watershed. Double-circuiting the crossing of the Cedar River will avoid clearing vegetation along the riverbanks. Constructing the towers with helicopters and using new tower footing designs called micropiles would reduce the amount of ground disturbance. The purchase or funding the purchase of land adjacent to the watershed for natural resource protection will more than offset the small amount of disturbance that is expected to result from the construction. Locating the Proposed Action adjacent to an existing line would take advantage of the existing access road system and would also minimize the amount of clearing of vegetation that would be necessary. See also response to Comment 340-002.

378-002 Please see response to Comment 349-001.

378-003 BPA anticipates no short-term or long-term impact to the municipal water supply as a result of the Proposed Action. If a decision is made to build the project, BPA would prepare and implement a storm water pollution prevention plan, under the National Pollutant Discharge Elimination System (NPDES), a program regulated by the Environmental Protection Agency. In complying with the NPDES requirements, no sediments in measurable quantities would be allowed to enter surface water. As a federal agency, BPA is required to comply with the Clean Water Act, and the National Drinking Water Act and BPA intends to do so. BPA is aware of the sensitivity of the area, particularly in the Cedar River Municipal Watershed, where drinking water is collected for 1.3 million people in the Seattle metropolitan area. BPA currently has an existing transmission line that crosses the Cedar River Municipal Watershed, and BPA knows of no problems the City of Seattle currently has with this existing line

378-005 The Draft EIS does not adequately consider the very serious environmental effects from this project. The project would require 1.5 miles of new road construction through the Cedar River Watershed and the Raging River Watershed. New roads are very likely to cause soil erosion and resulting damage to water quality and fisheries resources. Additional roads also cause fragmentation and have severe impacts on wildlife in these watersheds. Although the DEIS Summary seems to infer that the road rights-of-way would only require clearing for about 75 feet, in fact, cutting of trees can be as far as 200 feet from the power line (DEIS pages 2-5). Further, the roads would impact several wetlands. In light of the enormous amounts of money that the City of Seattle and many state and federal agencies are spending to protect wetlands and salmon habitat, this additional road construction is unwise as well as unnecessary. This is especially crucial when one considers the high likelihood that during a project of this scale, there will undoubtedly be fuel spills, oil leaks and other accidental but very serious incidents that will have a major effect. As a further critical factor, the BPA should commit itself not to use herbicides in the Raging River Watershed, which contains important salmon runs.

378-006 Further, the DEIS does not adequately consider BPA's duty to mitigate if the project proceeds with the Preferred Alternative. Lowland forests are a critical ecological element in the Western Cascades. The Cedar River Watershed contains an unusually large block of old growth. It also contains second growth that now has the possibility of maturing into old growth as a result of the Cedar River HCP. This project, with a right of way up to 200 feet from the power line, would cause serious fragmentation through this forest ecosystem. Mitigation should include replacement habitat, including forests and wetlands, which should be in close proximity to the area that is disturbed. To the extent that local areas are not used for mitigation, the area of mitigation should be increased as the mitigation moves in distance. If mitigation is employed, the BPA should look at several close by areas in Green River, Raging River, near Selleck, and upper Rock Creek Valley.

378-008 Further mitigation should include but not be limited to the height of any transmission lines crossing the Cedar and Raging Rivers should be high enough to allow late successional forest to grow to 200' tall in the riparian zone of the river, and adjacent slopes. Given the topography on either side of the river, that should be feasible. The height of the towers should be increased if necessary.

378-009 Roads outside of cleared powerline right of way should be eliminated. Helicopters and/or trails to access those sites should be used instead. Any roads constructed should be offset by eliminating roads elsewhere in the watershed. No staging area should be allowed inside the watershed.

378-010 Furthermore, the DEIS fails to address cumulative impacts of this and other similar projects. Particularly when one looks at this in conjunction with existing transmission lines, the impact to forests and wildlife corridors becomes more than a little significant. In fact, this project degrades wildlife corridors in this critical ecological connection to Tiger Mtn. and Rattlesnake Ridge.

378-011 Whereas the current project will significantly affect the watershed, another route through the watershed would be far worse. Thus, I would strongly object to this course of action.

378-012 I believe has a long ways to go to adequately study the impacts of this project and the solutions to these and other serious problems. The Draft EIS lacks important site specific information on the location of towers, roads, and staging areas. It's analysis of streams and fisheries is inadequate. The cumulative affects analysis is essentially non-existent. The DEIS fails to consider a full range of alternatives. A supplemental Draft EIS should be produced and a broader public involvement process implemented.

378-013 I look forward to commenting on an improved supplemental DEIS which address these and other concerns that the current DEIS fails to address or addresses inadequately.

Sincerely,


Harry Romberg

other than an ongoing noxious weed problem that BPA is aware of. BPA would take precautions, such as washing vehicles, to prevent the spread of noxious weeds if BPA decided to build a line through the CRW.

BPA is working with Seattle Public Utilities and the Muckleshoot Tribe to develop a long-term solution to the noxious weeds issues on the CRW and on other BPA ROWs.

378-004 Please see the response to Comment 340-003.

378-005 Comment noted. BPA feels that we have adequately addressed the impacts of the project. Regarding potential soil erosion, BPA would comply with the Clean Water Act and the NPDES requirements in designing and implementing a storm water pollutant prevention plan. Erosion control devices would be left in place until the area has become at least 70 percent stabilized. They then may be removed or remain in place for a longer period. When removed, a Notice of Termination will be filed with EPA.

Please see response to Comment 357-004 addressing habitat fragmentation.

With respect to the clearing impacts, the commenter is correct, danger trees could be taken as far or farther than 200 feet from the power line, depending on their height, condition, and relationship to the line. See response to Comment 340-004.

378-006 Please see response to Comment 349-004.

378-007 Please see response to Comment 340-002.

378-008 BPA proposes to double circuit (at a cost of over \$2 million) the proposed line with the existing line at the crossing of the Cedar River. This would avoid the need to clear additional riparian vegetation along the banks of the river. The crossing at the Raging River would use tower heights that would minimize clearing in riparian habitat as much as possible.

378-009 BPA is only proposing to build access/spur roads outside of the proposed right-of-way to avoid wetlands. Trails are not sufficient

surfaces for the equipment used to build and maintain the line. Helicopters would be used to construct the project, but BPA needs access to its tower sites at all times to operate and maintain the transmission system. Regarding eliminating roads elsewhere in the Watershed, BPA has no control over existing roads on private land. To access its transmission system, BPA prefers to acquire rights on existing access roads and only builds its own roads where there are no existing roads or access to those roads has been denied.

- 378-010 BPA feels that it has done an adequate job addressing cumulative impacts of past, present and any reasonable foreseeable future projects in the area in the SDEIS. BPA disagrees that critical wildlife corridors would be affected between Tiger Mountain and Rattlesnake Ridge.
- 378-011 Comment noted. BPA agrees that of the alternatives under consideration the Proposed Action is the preferable route.
- 378-012 and -013 Comment noted. A SDEIS was produced and distributed with updated information on cumulative impacts, fisheries, streams, mitigation measures, and site-specific information.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <u>KELT-379</u> RECEIPT DATE: SEP 04 2001
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From: Peter Roth [peterbroth@yahoo.com]
Sent: Sunday, September 02, 2001 4:05 PM
To: lcdriessen@bpa.gov, comment@bpa.gov
Subject: Raging Cedar Powerline/Kangley-Echo Lake Transmission Line Project comment

To Lou Driessen:

I would like to comment on Raging Cedar Powerline/Kangley-Echo Lake Transmission Line Project proposal.

While I support the addition of circuits to towers in the existing corridor, I must insist that any forest or wetlands that are damaged be adequately replaced. This requires a comprehensive Environmental Impact Statement (EIS) with a substantive analysis of ALL cumulative effects of any changes to the ecosystem. Included in this EIS should be alternatives that require NO environmental destruction. These non-destructive alternatives are the most important part of the EIS because they would require the least amount of effort and resources to implement.

Thank you for taking the time to read my input.

Sincerely,

Peter Roth
 7415 - 5th Ave NE #208
 Seattle WA 98115-5370

379-001

379-001 Please see response to Comments 349-001, 340-003, and 409-002.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <u>KELT-380</u> RECEIPT DATE: SEP 04 2001
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From: Kpthomas1@aol.com
Sent: Sunday, September 02, 2001 8:02 AM
To: lcdriessen@bpa.gov, comment@bpa.gov
Subject: Proposed Powerline in Cedar and Raging River watersheds

Bonneville Power Administration,

I am writing to voice my opposition to the proposed nine miles of new powerline which the BPA is considering building in the Cedar and Raging River watersheds. These areas should not be subject to the road-building and clear-cutting which the installation of new powerlines would entail.

Any new lines should be placed on already existing towers, to minimize damage to the forests in the watersheds. Any damage done to forests or wetlands by the installation of new powerlines should be replaced.

Our watersheds and forests require protection now and in the future. Please do not build new powerlines.

Sincerely,

Karen P. Thomas
 4435 First Avenue NW
 Seattle, Washington 98107

380-001

380-001 Please see the response to Comment 340-003.

Kuehn, Ginny -KC-7

From: bweeks [bweeks@quidnunc.net]
Sent: Monday, September 03, 2001 10:26 AM
To: lcdriessen@bpa.gov, coment@bpa.gov
Subject: BPA-Cedar River

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-381</i>
RECEIPT DATE: SEP 04 2001

Dear Mr. Dreissen,

I am deeply concerned about the clearcut that the Bonneville Power Administration proposes to make within the Cedar River Watershed. Instead, why not improve the existing corridor? Bonneville could add additional circuits to the towers in the present corridor instead of clearcutting for a new corridor. In any case, before permitting BPA to act, demand a new Environmental Impact Statement that includes all necessary information (the present one is insufficient), that presents alternatives including conservation, and that provides a substantial cumulative effects analysis. Finally, BPA should be made responsible for replacing any forest or wetlands that are damaged in the course of this new work.

Sincerely,
Robert R Weeks

381-001

381-002

381-001 Please see the response to Comment 340-003.

381-002 Please see responses to Comments 340-002, 350-003, and 357-003.

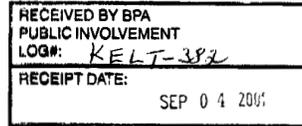
SIERRA CLUB
 Cascade Chapter
 8511 – 15th Ave. NE
 Seattle, Washington 98115

September 3, 2001

Lou Driessen, Project Manager
 Bonneville Power Administration
 PO Box 3621
 Portland, Oregon 97208

Re: Kangley-Echo Lake Transmission Line Project

Dear Mr. Driessen:



382-001 | We have reviewed the Draft EIS on the Kangley-Echo Lake Transmission Line Project, also known as the Raging Cedar Powerline, due to its impact on those two river valleys. As proposed, the Sierra Club is opposed to this project.

382-002 | BPA lines have huge impacts on forests and related wildlife including loss and fragmentation of habitat. Impacts of construction and operation will adversely affect water quality for a municipal water supply, affect compliance with the ESA, and diminish efforts to recover salmon and other listed species. Moreover, BPA would clearcut a swath through the watershed forest that we just succeeded in protecting.

382-003 | The EIS is deficient for several reasons: an inadequate demonstration of need, failure to analyze a full range of alternatives, failure to acknowledge the seriousness of impacts, incomplete information, failure to provide adequate mitigation, and avoiding the true costs of alternatives. We ask that you correct these deficiencies and publish a supplemental Draft EIS.

Proposal

This is a substantial project, constructing nine miles of new 500kV line with towers 135' high. BPA proposes to clear vegetation from 160-300 acres and construct at least a mile and a half of new road. Also proposed are three staging areas of undetermined size and location, plus a three acre expansion of an existing substation. The cost is estimated at \$11.5 million plus \$6.5 million for substation addition (S-3).

Need

Purpose and Need Unsubstantiated

382-004 | The need for this project has not been demonstrated, and the "purpose and need" statement in the DEIS is not clearly defined. The EIS merely claims that this project is needed to maintain system reliability and describes recent weather and general electrical grid situation and efforts at conservation. However, there is no substantive information that demonstrates that this project is necessary, nor that a more aggressive conservation effort would be a viable alternative.

382-005 | There is no explanation of the electrical transmission system serving the King County area that supports the necessity of the proposed line. The DEIS should include a regional system analysis that shows the current situation and other improvements BPA is

considering in the near term and distant future so the reviewer can understand why this specific link is necessary. Furthermore, it should demonstrate why BPA feels this project must be done in a particular manner and time frame that appears to preclude all but the selected alternative.

382-001 | Comment noted.

382-002 | Comment noted.

382-003 | Please see responses to Comments 394-003, 378-012, and 378-001.

382-004 | The description of the purpose and need for this project is greatly expanded in Chapter 1 of the SDEIS. A summary of the transmission planning studies (Appendix H) is available upon request.

382-005 | BPA performed a regional system analysis that supported the subject project. These analyses are conducted through computer simulation studies. A summary of these studies is available upon request (Appendix H).

BPA is considering other improvements in the area. See Section 1.7 of the SDEIS.

382-006 | Comment noted. Cost estimates for all the alternatives in the SDEIS were updated to include mitigation cost estimates. BPA is committed to providing the appropriate level of mitigation as required by King County's Environmentally Sensitive Areas Ordinance, Chapter 21A.24 of the King County Code. Although BPA as a federal government agency is not required to meet these procedural requirements, it strives to meet or exceed local development regulations' substantive requirements wherever possible. As a result, BPA is working with King County as well as Seattle Public Utilities and the U.S. Fish and Wildlife Service in developing a reasonable mitigation package that is acceptable to all of these agencies' needs. Please also see response to Comment 340-002.

382-007 | Please see response to Comment 394-090.

Impacts

- 382-006 Contrary to BPA's description, this project has serious and extensive impacts. We are very concerned that BPA's approach to these impacts is weak and fails to fully understand them or fully mitigate for them. Such a project should not be constructed without such mitigation. Since full mitigation is not considered in the cost estimates, it is unclear whether alternatives rejected for cost would be less expensive.
- 382-007 Serious cumulative impacts ignored
BPA claims, "...the relatively small areas required for the proposed transmission facilities would have only a low impact." (DEIS 4-6). This disregard for the impacts to precious resources, such as late-successional forest, clean drinking water, and cultural resources as well as the cumulative impacts of transmission lines crisscrossing the forests of this region, is indicative of BPA's lack of understanding of the impact of this proposal. The cumulative effects analysis is extremely weak, with no data to justify conclusions. The EIS merely states that the cumulative impacts of forest loss is considered low (DEIS 4-53). On the contrary, the cumulative effects of this and other BPA lines is significant, and when combined with other loss of forest becomes quite significant. This disregard for the cumulative effects of BPA's actions is a serious deficiency of this EIS.
- 382-008 The DEIS must describe the impacts of existing line, as well as the combined effect of two lines. We understand that BPA is currently considering a similar project from Echo Lake to Monroe. This and other proposals must be described and the cumulative effects evaluated.
- 382-009 1.5 miles of new road construction has significant adverse impacts. Roads have high impact to soils, water quality, fragmentation of habitat, and wildlife behavior. BPA's proposal that 50' wide easement outside of powerline ROW seems excessive. While for planning purposes that might be appropriate, the road construction should be much narrower and specified within the narrowest easement. A 16' road surface plus 4-6' near curves is also excessive (DEIS p2-7). A single land road should suffice for equipment. Helicopters should be used if cranes cannot negotiate single lane roads with curves. Ten feet on either side of the road for ditches is also excessive. This 36' wide impact is not consistent with the 20' wide disturbance width used for the DEIS analysis (DEIS p2-7).
- Protecting Important Resources
The Cedar River watershed encompasses a unique lowland forest that will be protected in perpetuity, thanks to the City of Seattle's vision and commitment. Surrounding remnants of the original forest, the second growth has been growing and developing for up to 100 years. Nowhere else in the county will we see such ancient forests- at low elevation, in large blocks. This is also a critical ecological connection to Tiger Mtn. and Rattlesnake Ridge.
- 382-010 While lands in the Raging River may be managed for timber, it will provide age classes of over 40 years, while in the powerline right of way trees will never exceed a few years. Due to conservation easements being developed in the valley, it should not be converted to urban uses. This and its location makes this valley particularly significant for forest ecosystem conservation. Thus, BPA should mitigate for the difference in this type of forest, by acquiring and conserving for forestry an equivalent amount of land that would otherwise be converted to non-forest uses.
- The impact of the BPA line will be in perpetuity, therefore the mitigation must be in perpetuity. The only reasonable solution is BPA must replace the lost habitat, sometimes referred to as compensatory mitigation.
- There are several excellent candidates in the vicinity of the line, including sections near Selleck, Taylor Mtn., the upper Rock Creek valley and Green River.

- 382-008 The DEIS and SDEIS contained a cumulative impact analysis that looked at the cumulative impacts of existing facilities when added to the proposed project and any reasonable foreseeable future actions. BPA does not know whether a line between Echo Lake Substation and Monroe Substation is needed. BPA's system planners are constantly studying the system, and only propose improvements to the system as they are needed. System planners have not determined that such a line is needed, and therefore, it would not be considered to be reasonable foreseeable at the present time.
- 382-009 The 50-foot road easement is a BPA standard for acquisition of a road to be constructed along a 500-kV transmission line. The typical cross section of a 16-foot wide road with ditches is 36-foot maximum with additional as may be required for cuts and fills or curve widening. Typically, a 16-foot wide road on the type of terrain in the project area would not require more than 26 feet.
- BPA will specify helicopter/sky crane tower erection within the Cedar River Watershed to minimize impacts in the area. Helicopter tower erection would also be used outside the Watershed in those areas where access might impact wetlands. Roads would still be necessary to allow access to most of the tower sites that could be reached from uplands, for both construction and maintenance activities. However, no wetlands would be filled to reach tower sites.
- 382-010 Comment noted. BPA has purchased or will fund the purchase of land to offset those forestlands and wetlands that would be lost due to the Proposed Action. See response to Comment 340-002.
- 382-011 Please see response to Comment 394-034 and Section 2.1.1.4 of the SDEIS.
- 382-012 A SDEIS has been provided with more in-depth analysis of a variety of issues raised during the comment period for the Draft EIS.
- 382-013 When siting its transmission facilities, BPA avoids sensitive areas such as wetlands where it can. Where it cannot, these sensitive

382-011 The DEIS states several times that the clearing would be 150' wide, but table 2.1 (DEIS p2-6) says 374'. If no extra clearing is done between towers (that is 75', assuming as close as possible), then 187' would be cut on the other side; thus, total clearing is 262' wide. Additional "danger trees" could be felled (p S-3). This could increase to up to 476' slope distance through mature and old-growth forests. At only 150' wide, 9 miles of clearing equals more than 160 acres, but it is apparent that clearing could easily exceed 300 acres, much of it late-successional forest. This is a significant impact on forest, which only increases if we assume blowdown in adjacent forest due to this clearing. In addition, there would be 3 acres of clearing for substation expansion. BPA is considering reduced clearing within the Cedar River watershed, but provides no specifics. This is crucial information and should be in a supplemental Draft EIS, rather than in the Final EIS.

382-012 Impacts on Wetlands
Ten wetlands with 242 acres are located within 500' study corridor (DEIS p3-47). While not all may be directly impacted by clearing and construction, all will be seriously affected. Mitigation measures should address all these. The first approach is avoidance. If an area can't be avoided, then replacement areas must be acquired and protected.

382-014 Important fisheries in Raging & Cedar Rivers
The City of Seattle is working to re-establish salmon in Cedar River. The Raging River has coho and Chinook salmon. Additional road construction, clearing, and potential spills all will adversely affect these species.

382-015 Impact on behavior of wildlife
Marbled murrelets may be using the upper watershed. This species tends to fly along the river corridors. Thus, any towers or lines that cross the rivers would present a hazard from both collision and electrocution. This is a significant impact, and one that bears on BPA's obligations under the ESA. As the forest approaches late-successional character, spotted owls will increase their use in this area. BPA's line will eliminate potential habitat and make it more difficult for owls to reach habitat to the west. Again, BPA's action may not be consistent with the ESA.

Fragmentation of habitat is a major concern, and one not adequately treated in the DEIS. This creates barriers to wildlife movements due to inappropriate habitat conditions and/or increased predator success. In some cases makes good habitat unusable. It is imperative that the upper and lower Cedar River forests be connected by the best possible habitat. Similarly, the connection to Tiger Mtn. and other forests in the vicinity is needed. BPA's powerlines are one of the most significant obstacles to achieving those goals.

382-016 Corridor management needs revision
The management of other vegetation in the ROW corridor (DEIS p2-5) is excessive and needs to be revised. Less clearing and more allowance for shrubby and woody vegetation should be included. This may require more frequent attention, to allow maximum height of vegetation, while maintaining safety clearances. Wherever topography is favorable, taller trees should be allowed to grow. In certain areas, this could be combined with installing taller towers, (thus increasing line height), to provide considerable forest cover.

Seattle City Light's management within the Ross Lake NRA has begun to incorporate some of these approaches. In special areas, such as the Cedar River watershed, special actions are necessary. While this might require more frequent corridor management, that is part of the price for traversing these special areas.

areas are spanned, and where they cannot be spanned, BPA minimizes its impact to the extent that it can. BPA has determined that the Proposed Action would convert approximately 14 acres of forested wetlands to scrub-shrub wetlands. No wetlands would be filled. BPA is looking for ways to mitigate for the wetland impacts; however, it proposes to use part or all of the 352-acre parcel recently purchased from the Trust for Public Land to mitigate for the conversion of forested habitat to non-forest uses, as well as to mitigate for a portion of wetland impacts associated with the Proposed Action. See also response to Comment 340-002 for information about compensatory mitigation.

382-014 Comment noted. BPA is aware that the City of Seattle intends to reestablish some species of salmon in the Cedar River, above Landsburg Dam, and that the Raging River has coho and chinook salmon. While additional road construction, clearing activities and potential spills could adversely impact these fish species, BPA would put in place mitigation measures to minimize any impacts. Additionally, BPA has written a biological assessment (BA) on the Proposed Action that has concluded that the Proposed Action may affect, but is not likely to adversely affect the chinook salmon (listed as threatened in the Puget Sound area) and their designated habitat, and that it may impact, but is not likely to adversely impact, the coho salmon (listed as a candidate species, under the Endangered Species Act).

In January 2002, NMFS issued a letter to BPA concurring with its effect determination of "may affect, but not likely to adversely affect" for Puget Sound chinook and their designated critical habitat; therefore, BPA has concluded informal consultation on these actions in accordance with 50 CFR 402.14 (b)(1). See Appendix U.

382-015 Section 4.1.1.1 of the Wildlife Technical Report (Appendix B) was amended to include a discussion of potential collisions with power lines by marbled murrelets potentially flying up river corridors. Section 3.3.2 was revised to include marbled murrelets as a species to be analyzed.

Section 3.3.2.1 of the Wildlife Technical Report was revised to reflect the level of potential future habitat loss in the lower

382-017 The new clearing and construction will allow incursions of noxious weeds. The current ROW has weeds, so the regional plan referenced in the DEIS is not adequate to control them. Additional clearing will engender additional weeds. A commitment to a control plan with proven effectiveness, even if it is all manual, must be a part of any powerline corridor.

We are pleased with your commitment to not use any herbicides in the Cedar River Watershed. (p S-5). However, it appears that it will be used in the Raging River watershed. The salmon in this river need the highest quality water and the powerline cross the river and continues for several miles in the watershed.

Alternatives

Range of alternatives is inadequate

The alternatives did not represent a full range, as numerous possibilities were rejected without further study. NEPA requires that reasonable alternatives be considered which include those alternatives that can meet the objectives, as defined by the purpose and need statement, of the proposal. For the stated goal, there is a much larger range of reasonable alternatives.

382-018 The DEIS does not provide sufficient analysis of alternatives outside of the Cedar River Watershed to support their elimination without detailed evaluation. The DEIS notes impacts to “developed land and people living in the area.” While it is clear there would be impacts, there is no analysis of the type, amount or significance. BPA cannot simply dismiss an alternative just because it would have impacts. All of the alternatives through the watershed also have impacts, and yet they were not dropped from consideration. Lacking stated criteria and evaluation, there is no justification for dropping certain alternatives and narrowly limiting the range of alternatives considered in the DEIS.

The EIS must evaluate the full range of reasonable alternatives. The DEIS also needs to present a detailed cost justification for the proposed action to ensure that agency funds are being spent prudently. This should include full consideration of anticipated future projects, as well as considering mitigation measures that could avoid or reduce impacts of the proposed action. Furthermore, NEPA requires that federal agencies consider alternatives that can accomplish the objectives of the proposal, but at a lower environmental cost.

Alternatives not considered

382-019 Adding a circuit to the existing towers, or replacement towers should still be considered. The risk of loss of a tower is very low, especially given the limited access, so the risk of losing two circuits at the same time is low. At your public meeting, a BPA staff person said it would require a six months outage to replace the existing towers and line with a double circuit. What length of time can you have this line out of service? Did you analyze using existing towers within the Cedar River Watershed, and separate towers outside? With accelerated construction activities and careful scheduling could the outage period be reduced to levels that would not significantly affect system loads? Again, there was no information in the DEIS on these questions.

Alternatives of rebuilding other lines and adding equipment at substations to increase voltage were briefly mentioned and dismissed (p2-18). Information on these options should have been expanded and compared to the proposed action.

We agree that no additional powerlines from Stampede Pass to Echo Lake should be built, but rebuilding an existing line was dismissed with little discussion except the cost would be higher. There is no assessment of whether BPA would in the future propose an additional circuit or increase of voltage on this line. Would rebuilding a 500kV double circuit now be more cost effective in the long run? Will BPA want to build another powerline in the Echo Lake-Raver corridor? If so, why doesn't the agency

Cedar River Watershed and to discuss the potential impacts of creating dispersal barriers for this species. Although spotted owls may use habitat in the lower Cedar River Watershed in the future, it is not guaranteed.

The analysis of potential impacts from habitat fragmentation within the Cedar River Watershed was expanded in Section 4.1.1.1 of the Wildlife Technical Report.

382-016 For safe and uninterrupted operation of the transmission line, vegetation within the ROW is not allowed to grow above a certain height. Restrictions vary, however, depending on the terrain, the type of vegetation, and growth rates. It is BPA's intent to protect and maintain, as much as practicable, vegetation in the ROW that will not interfere with the safe and reliable operation of the line. In some places, towers are sited so that trees in canyons and along rivers can be maintained. In addition, long-term vegetation management on the ROWs includes the promotion of low-growing plant communities on the ROWs to “out compete” trees and tall-growing brush.

382-017 BPA contracted for a noxious weed survey in July 2001. Six noxious weed species were found within the Proposed Action area, with three being so common that King County and the Noxious Weed Program recognizes that control or eradication is not economically feasible. Most of the noxious weeds were found on the more disturbed sites outside the Cedar River Watershed. During construction, BPA will follow the recommendations in that report regarding preventative measures such as educating the construction contractor to identify and avoid infested areas, washing vehicles and equipment prior to entry and upon moving to another location, using certified weed-free materials brought onto the project area, and reseeding disturbed areas. Following construction, BPA will follow standards and guidelines set forth for noxious weeds as defined in the FEIS and Record of Decision for BPA Transmission System Vegetation Management Program (BPA 2000). The Vegetation Management ROD can be found on the Internet at www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/VegetationManagement_EIS0285. See also Appendix K of the SDEIS. BPA and SPU are drafting an agreement that addresses

consider using towers that carry two circuits, so we don't have to go through the same discussion again in a decade or two.

We have similar questions about the Covington-Maple valley 30kV line. There is no backup information to the claim that that circuit could not be taken out of service for reconstruction or that vacant circuits could not be used as part of this alternative. (p 2-17)

Routes outside the watershed were rejected, but will these be necessary in the future anyway? The impacts were vaguely described, but at least one of these should have been included in the EIS. All the impacts of such lines should be analyzed and compared to the proposed action.

382-020 We are adamantly opposed to other routes through the Cedar River watershed (alt 2, 4a, 4b) as they also have impacts associated with the preferred alternative plus additional destruction and fragmentation of forests and other natural habitats.

Conservation should be first choice

382-021 We are concerned with the lack of consideration of energy conservation. With reduced demand, such lines would not be necessary. The DEIS did not adequately consider alternatives of energy conservation, merely stating that BPA was doing all it could. We do not agree. While most of our comments in this letter focus on the project, we have not been convinced that conservation would not obviate the need for this project.

Environmental Analysis

Inadequate information and analysis

382-022 The DEIS has inadequate information and incomplete analysis for a reasoned decision. It violates NEPA by failing to fully disclose all environmental impacts. Clearly, a supplemental DEIS is needed.

382-023 For instance, the DEIS says that three staging areas will be needed (S-4). How large will these be? Where will they be located? What restoration measures will be implemented once they are no longer needed? This is key information lacking in the DEIS.

382-024 The fisheries analysis in the DEIS and technical appendix is inadequate due to lack of assessment of Type 4 and 5 streams, lack of thorough erosion assessment, minimal site-specific information on streams, no quantification of impacts by stream crossing, and lack of disclosure as to the extent of clearing in riparian areas. These omissions effectively preclude an evaluation of project effects.

382-025 The DEIS seems to avoid the fact that the Cedar Watershed is an unfiltered source of high quality water for over a million people in the Puget Sound region. The DEIS says nothing about potential impacts to the drinking water supply for these people. Incidents such as toxic spills or turbidity plumes are serious risks in any watershed, but are totally unacceptable in this watershed. What specific measures will be implemented to eliminate this risk? In addition, public notices and public meetings related to the NEPA scoping and DEIS comment periods have not been effective in involving those that drink this water. Additional public involvement with a Supplemental Draft EIS should be done.

382-026 Many of the impacts noted in the DEIS meet CEQ's definition of "significant." However, the DEIS avoids this determination, using instead the relative terms, "low, medium, and high." Thus, BPA has not taken a "hard look" at the impacts, as required by CEQ. Consequently, the public, other agencies, as well as BPA decision-makers do not have adequate information to review. Because of the importance of "significant impacts" in the NEPA process, failure to disclose this information is as serious breach of NEPA itself.

vegetation management of target species, including weeds, within the CRW.

382-018 In response to comments received about the range of alternatives analyzed in the DEIS, BPA analyzed five additional alternatives in the SDEIS that would avoid construction in the Cedar River Watershed.

382-019 Please see the responses to Comments 340-003 and 382-018.

BPA stated that the line could not be taken out of service long enough to be rebuilt. This is one of the main lines BPA relies on to carry power for the Seattle area when the existing Raver-Echo Lake line is forced out of service. Without the Covington-Maple Valley line, load in the Seattle area and/or Treaty return for Canada may have to be curtailed for the time period the line is out to be rebuilt. BPA has reevaluated and as a result included Alternative A, which uses the Covington-Maple Valley line corridor in the SDEIS.

The existing Raver-Echo Lake line (formerly the Raver-Monroe line) was built in the early 1970s. This line has been sufficient for system load purposes for the last 30 years. The addition of the second line will more than triple the power carrying capability of the two lines because each line will be more effective in backing up the loss of the other line and should therefore provide another 30 to 50 years of load serving capability.

382-020 See response to Comment 382-018.

382-021 Please see response to Comment 349-001.

382-022 Please see response to Comment 382-012.

382-023 BPA has no information on where the staging area(s) would be located at this time. The selection of staging areas would be at the discretion of the contractor and would be approved by the landowner. No staging areas would be in the Cedar River Watershed.

382-024 Erosion impacts and riparian clearing are assessed in Section 4.1 of the Fisheries Technical Report (Appendix A). Site-specific stream data are in Appendix A of the Fisheries

- 382-027 Several key aspects of the proposed transmission line are not described in sufficient detail to support an evaluation of impacts. We understand that BPA completed a Final Biological Assessment for this project during the public comment period for the DEIS. This indicates that sufficient details was available for the DEIS. The fact that specific, known design information for the proposed action was omitted from the DEIS indicates BPA has violated NEPA by failing to fully disclose environmental impacts. Please provide us with a copy of the biological assessment, and include it in a supplemental DEIS.
- 382-028 Failure to adequately describe the project compounds the vagueness of proposed mitigation measures, making it impossible to evaluate the effectiveness of mitigation. The net result is a level of uncertainty of the proposal's impacts that renders the DEIS useless to reviewers and decision-makers.
- 382-029 The impacts of the project are potentially greatest for the Cedar River Watershed, especially considering the area is the region's major drinking water supply, and the land is being managed under a complex Habitat Conservation Plan (HCP). However, BPA's proposed actions and their impacts are described so minimally that it is not possible for the public to evaluate the project's impacts. Once again, the DEIS does not fully disclose environmental impacts.
- 382-030 Site specific information on clearing requirements in the watershed (p2-6) and access roads (p2-7) is lacking, although at one point the DEIS describes removal of trees on the Cedar River as a "high" impact (p4-36). BPA attempts to avoid the requirement with an explanation that the information will be available for the Final EIS. This information is critical to evaluating project impacts and mitigation measures and therefore should be provided as part of the DEIS. Also, the DEIS does not describe tower locations, which could have substantial impacts. This does not provide the public with adequate opportunity to review the proposal. Again, a supplemental DEIS is needed.
- 382-031 Lack of consistency with federal, state, and local regulations
NEPA regulations require that an EIS discuss how the proposed action is consistent with federal, state, and local land use plans and policies. Has this been done, and if so how has BPA reconcile any conflicts. Two examples in the subject project are King County's sensitive areas and Shoreline Management provisions.
- 382-032 We cannot find where BPA coordinated with federal agencies on Endangered Species Act prior to releasing the DEIS. Perhaps this is one reason that the DEIS fails to fully assess impacts on endangered and threatened species such as Chinook salmon and coho salmon, and fails to address impacts on marbled murrelets. BPA has an obligation under the Endangered Species Act and Northwest Power Act to protect, mitigate, and enhance salmon runs where affected by its actions. However, BPA's proposed action has adverse impacts on federally listed salmon and their habitats that are not adequately mitigated.
- 382-033 This project will directly affect the Cedar River Habitat Conservation Plan, under the Endangered Species Act. BPA indicates that USFWS will have to "decide if the transmission line facilities require any change to the existing Habitat Conservation Plan..." The DEIS does not discuss the proposed action's impacts on the HCP, but the DEIS fisheries technical report suggests construction of the proposed action would violate provisions of the HCP. Commitments made by the City in its HCP would be substantially diminished by the BPA project, reducing the conservation value of the plan. The City should not need to modify the HCP as a consequence of BPA's activities. If BPA requests such changes, it must provide mitigation for any impacts that reduce the conservation value of the City's HCP that, at a minimum, compensates for that reduction in value.
- 382-034 Mitigation
The DEIS lacks mitigation for unavoidable impacts.
The DEIS suggests "mitigation measures", but these are actually standard practices (sometimes called best management practices or BMPs) and not really project mitigation measures. They do not offset, reverse, or rectify the impacts of constructing the proposed project. Thus, BPA's suggestion that "maintaining environmental quality" (S-2) is one of the purposes in developing this project, is but an empty statement. For example, although the DEIS states that impacts on ESA-listed species of fish are "high," BPA fails to commit to any mitigation that would offset those impacts.

- Technical Report. Data do not indicate that detailed analysis of Type 4 and 5 streams would substantively alter the findings of the analysis. The effects of the Proposed Action on such streams would be approximately the same as the effects on Type 3 fish-bearing streams, and those effects are detailed in Section 4.0 of the Fisheries Technical Report.
- 382-025 Please see response to Comments 378-005 and 382-012.
- 382-026 BPA agrees that the proposed project has potentially significant impacts. That is why we immediately proceeded to produce an EIS rather than an Environmental Assessment. However, we intend to mitigate any potentially significant impacts to a level below significance because we believe doing so is in the public interest. We disagree that it is improper to use relative terms such as "low, medium or high" to discuss the nature of the impacts. We believe making these assessments helps the public and decision-maker to be better informed concerning the nature of the various impacts upon the environment.
- 382-027 BPA hired a team of consultants to assist the agency develop technical study reports that the agency used to write the DEIS and the SDEIS. Subsequently, BPA needed to survey the Proposed Action before the tower sites could be located and access/spur roads identified to reach these facilities. Following the survey, BPA identified where the wetlands were, and sited the proposed towers to avoid these sensitive areas. While it is true that our biological assessment contained the proposed tower site and access/spur road locations and was printed a short time after the DEIS, this information was not available at the time the DEIS was written. Additional information is in the SDEIS.
- 382-028 Chapter 2 of the SDEIS describes the alternatives considered to meet the need, and summarizes how the environmental consequences differ among alternatives. More detailed information is presented in Chapters 3, Affected Environment, and Chapter 4 Environmental Consequences.
- 382-029 Chapter 4, Environmental Consequences, identifies the impacts of the Proposed Action and alternatives.

382-035 | We understand that BPA has not mitigated for habitat losses of their powerlines in the past. But this must change. Unless and until BPA makes a binding commitment to replace lost, damaged and fragmented habitat, we must oppose construction of this line.

382-036 | BPA cannot externalize the costs of this project, as it has done with previous lines. The loss of the forest is more than just a loss of timber revenue. It is a permanent loss of habitat that is rapidly disappearing- especially in the foothills of the Cascades in King County. The cost of such replacement must be included in the cost, then compared to other alternatives. The sale of timber by the underlying landowner does not mitigate the long term impacts of logging. Past practice of ignoring the loss of forest permanently is no longer defensible.

The mitigation measures presented in the EIS are wholly inadequate for a project of this nature. All construction alternatives should include the following.

382-037 | ➤ BPA should replace all habitat damaged within the project area with equivalent habitat type and quality in the vicinity, or if unavailable, then increase acreage in ratio to lesser quality, plus a premium for fragmentation.

382-038 | ➤ The height of transmission lines at Cedar and Raging River crossings should be high enough to allow late successional forest to grow to 200' tall in the riparian zone of the river and to mature heights on the slopes above the river bottom. Given the topography on either side of the river, that should be feasible. BPA should increase the height of the towers in that vicinity if necessary. We are disappointed that this issue was not addressed in the DEIS. We had brought it up during scoping and public meetings at that time.

382-039 | ➤ Eliminate roads outside of cleared powerline right of way. Use helicopter and/or trails to access those sites. Any roads constructed should be offset by eliminating an equal or greater amount of road in the affected watersheds, over and above what is planned by the land owner.

382-040 | ➤ Minimize tree cutting outside of 150' corridor; first option should be to only top thjem, then, if necessary, removing those trees deemed likely to topple into the lines within a short period of time, rather than wholesale clearcutting.

382-041 | ➤ Apply measures to prevent any and all toxic materials and sediment from entering surface or subsurface waters in the Cedar River Watershed.

Conclusion

382-042 | The Draft EIS is inadequate, and should be redone to display a full range of alternatives, demonstrate need, include relevant information, adequately assess the impacts and incorporate adequate mitigation, describe required coordination with other governmental entities, and incorporate and describe all costs of the project. The project fails to meet the requirements of NEPA and the ESA. We urge BPA to withdraw its proposal and only reissue a Draft EIS when has a proposed action that is legally and environmentally acceptable.

Thank you for this opportunity to comment on the DEIS. Please keep us apprised of any actions related to this proposal.

Sincerely,

Charles C. Raines
Director, Cascade Checkerboard Project

cc: Senator Patty Murray
Senator Maria Cantwell
King County Executive Ron Sims
Mayor Paul Schell

382-030 | Please see response to Comment 382-012.

382-031 | Section 5.10 of the SDEIS addresses the Coastal Zone Management Act. The information shows that BPA is, to the extent practicable, consistent with all federal, state and local government plans and programs, including the City of Seattle's recently adopted Habitat Conservation Plan (HCP).

With respect to the King County Environmentally Sensitive Areas Ordinance, Chapter 21A.24 of the King County Code, BPA is consistent to the extent that it can be. The proposed power line and access/spur roads were sited to avoid impacting sensitive areas. All are located on uplands. Where sensitive areas could not be avoided, i.e., conversion of forested wetlands to scrub/shrub wetlands within the proposed right-of-way, the impact would be minimized by undertaking hand clearing, and either leaving the vegetation removed within the right-of-way as wildlife habitat, or removing it by sky crane or helicopter to avoid ground disturbance to the wetlands, and avoid fuel loading within the right-of-way. Additionally, BPA would be providing compensatory mitigation as required by the King County Code to mitigate for altering these wetlands. With respect to the Shoreline Management provisions of the King County Code, BPA's proposed project would not be considered to be directly affecting the coastal zone. Although the proposed transmission line would cross two Class 1 Streams, the Cedar and Raging rivers, which are governed by the Shoreline Management Act, no ground disturbing activities would be undertaken within 200 feet of these waterbodies.

382-032 | Please see Section 5.2 of the SDEIS for a complete description of consultation with the U.S. Fish and Wildlife Service and NOAA Fisheries on threatened and endangered species. See also response to Comments 377-001, 382-014, 394-010, 394-088, 400-001, and 411-013.

382-033 | The DEIS (Pages 5-16) stated that the HCP covers only actions by the City of Seattle, and that activities undertaken by other agencies are not addressed by the HCP, and therefore, require separate reviews by FWS and NMFS. Furthermore, the DEIS stated that BPA is consulting with both FWS and NMFS to ensure compliance with the Endangered Species Act.

It is unlikely that the City of Seattle will be required to modify its HCP as a result of BPA's project.

While BPA is not requesting any changes to the HCP, BPA has purchased or will fund the purchase of land to provide compensatory mitigation to replace spotted owl habitat as well as to compensate for the conversion of forested wetlands to scrub/shrub as a result of project. See response to Comment 340-002.

While we recognize that the proposed project crosses the City of Seattle's CRW, we do not believe it will seriously interfere with the purpose or objectives of the HCP that Seattle Public Utilities recently adopted. While admittedly the project will have some adverse impacts, the proposed alternatives represent the least-damaging routes that could be identified. For example, impact to wetlands and cultural resources were avoided to the maximum extent practical. Additionally, BPA intends to mitigate for any adverse impacts resulting from project implementation in a manner consistent with the HCP purposes, and which will, in effect, keep the HCP whole.

382-034 Please see response to Comment 340-002.

382-035 Please see response to Comment 340-002.

382-036 Please see response to Comment 340-002.

382-037 BPA would be altering habitat on the CRW from a forested habitat to a non-forested habitat over the 5 mile right-of-way within the CRW. BPA has purchased land to offer as compensatory mitigation for the forested habitat that would be converted to a non-forest use. Please see response to Comment 340-002.

382-038 The 135-ft tall tower referred to in the EIS is an average based on past experience with 500-kV towers. The actual height of the towers would be determined during the design phase of the project. The towers flanking the Raging River will be sized to minimize clearing in riparian habitat. BPA is using double-circuit towers on the Cedar River crossing to eliminate clearing near the river.

382-039 BPA would be building access/spur roads outside of the cleared right-of-way only to avoid sensitive areas such as wetlands and their buffer areas. With regard to eliminating the need to access tower sites, BPA cannot do so. BPA needs access to each tower site to construct, operate and maintain the transmission system in a safe and reliable manner. BPA will specify that helicopter construction techniques be used for this project if BPA decides to build the transmission line.

BPA has no authority to eliminate roads in the Cedar River Watershed. Seattle Public Utilities owns all roads within its property boundaries. BPA holds easement rights across some of these roads.

382-040 Please see response to Comment 340-004. Topping is not a recommended alternative to tree removal and should only be used if there are no other alternatives.

382-041 Comment noted. As a result of this and another comment, BPA has requested that the tower steel manufacturer not dip the tower steel in a solution of sodium dichromate prior to shipment. Sodium dichromate is commonly used on tower steel following the galvanizing process to prevent white rust from forming on the tower steel during shipment. This material is water soluble, and would add a short-term pollutant to the Watershed. BPA thanks the commenter for the comment.

382-042 In response to comments, the SDEIS includes more information about these topics. BPA has initiated formal consultation with the USFWS and has concluded informal consultation with NMFS.

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <u>KELT-383</u>
RECEIPT DATE: SEP 04 2001

5027 19th AVE NE
SEATTLE, WA 98105
AUGUST 29, 2001

Communications

attn: Mr. Lou Driessen, Project Manager
Bonneville Power Administration - KC-7
PO Box 12999
Portland, Oregon 97212

Dear Mr. Driessen,

I am writing with regard to the Bonneville Power Administration's interest in building new powerlines in the Cedar and Raging River watersheds.

I appreciate the importance of providing electricity to customers and I admire BPA's ability to do so at a low cost. I am concerned however with BPA's proposal to install nine miles of 500 kilovolt lines with a necessity of clearing away between one hundred fifty to two hundred eighty five feet worth of trees. I am also concerned about the plans BPA has to build one and a half miles of new roads in order to accomplish this task.

Mr. Driessen, I am sure that you care about the ecosystem and that you love the outdoors as much as the next person. I gather that you comprehend the importance of low elevation forests, rapid loss of forests in King County, and Seattle's decision to preserve its watershed forests.

Sir, I am against building new 500 kilovolt

383-001 Please see responses to Comment Letter 361.

383-001

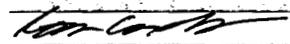
Mr Lou Driessen
 August 29, 2008
 page two

lines through the watersheds and I am opposed to construction of any roads in them. One of the reasons for my position is, has to do with salmon fisheries in Raging River as well as Seattle's attempts to re-establish salmon in Cedar River.

Mr. Driessen, I do however support BPA adding additional circuits to towers in the existing Corridor, if safe and if it can be done for a reasonable cost and without threat to BPA's workers.

Furthermore, I believe it to be of the utmost importance that any and all forests and wetlands that have been damaged by BPA be repaired through replacement. I also respectfully request a new Environmental Impact Statement with nothing less than all needed information, a substantive cumulative effects analysis as well as additional alternatives.

This letter states my position Mr. Driessen. I know BPA has a lot of pressure to produce but I think it can get the job done without harming our beautiful watersheds.


 TOM HUNDLEY
 tom@principia.edu

383-002 Please see the response to Comment 340-003.

383-002

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-384</i>
RECEIPT DATE: SEP 04 2001

4244 NE 88th Street
Seattle, WA 98115
August 31, 2001

Lou Driessen, Project Manager
Communications
Bonneville Power Administration - KC -7
Post Office Box 12999
Portland, OR 97212

Dear Project Manager:

384-001

This is to ask that the Bonneville Power Administration **build any new power lines through the Cedar and Raging River watersheds on already existing towers.**

384-002

The current plan--to clearcut a swath of forest (currently protected from logging) within the watershed and to construct new road--would have severe, extensive impacts throughout both watersheds. Wetlands, salmon grounds and fisheries, and forest habitat--all of which are at risk -- would be impacted by such a plan.

384-003

From my work in wetlands, I've found that mitigation does not recreate damaged or destroyed wetlands or forest. It may on paper, but the reality in every case is that the ecosystem never again works as it did before. This is true even for relatively small projects such as the BPA's proposed new 500 kilovolt line. A new Environmental Impact Statement (DEIS) is needed, with information and analysis of cumulative effects along with additional alternatives for the proposal to build within the Cedar River watershed.

I think it's vitally important to respect the sanctity of a protected watershed.

Sincerely,

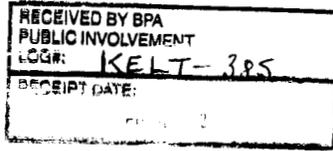


Lynn Pruzan

384-001 Please see the response to Comment 340-003.

384-002 See response to Comment Letter 361.

384-003 See response to Comment Letter 361.



Dear BPA Project Manager,

385-001

PLEASE ENTER THIS LETTER INTO THE PUBLIC RECORD WITH REGARDS TO THE DEIS FOR THE KANGLEY-ECHO LAKE TRANSMISSION LINE PROJECT.

385-002

I'D LIKE TO ADD MY VOICE TO THOSE WHO ARE CALLING FOR THE FOLLOWING.

① ANY NEW LINES SHOULD BE PLACED ON EXISTING TOWERS.

② IN ANY ALTERNATIVE, THE BPA MUST FULLY MITIGATE FOR ANY IMPACTS OF ITS PROJECTS.

ie- REPLACE ANY FORESTS YOU CUT OR WETLANDS YOU DESTROY

385-003

③ A NEW EIS SHOULD BE DEVELOPED THAT FULLY CONSIDERS THE CUMULATIVE EFFECTS OF THE PROJECT & ALL ALTERNATIVES.

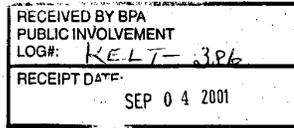
ROBERT WATTEZ
2624 NE 145 AV.
VANCOUVER, WA 98072

THANK YOU,

385-001 Please see the response to Comment 340-003.

385-002 BPA would not be filling any wetlands. See response to Comment 340-002.

385-003 Please see responses to Comments 350-003 and 357-003.



6215 Ravenna Avenue NE
Seattle, WA 98115-7025
August 31, 2001

Lou Driessen, Project Manager
Communications
Bonneville Power Administration - KC -7
Post Office Box 12999
Portland, OR 97212

Dear Project Manager:

386-001

Please, build any new power lines through the Cedar and Raging River watersheds on already existing towers.

386-002

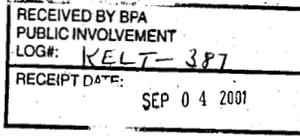
Also, please offer a new Environmental Impact Statement that supplies a substantive cumulative effects analysis of the proposal to build in the Cedar River Watershed, along with additional alternatives. The current plan--to clearcut a swath of forest (currently protected from logging) within the watershed and to construct new road--would have severe, extensive impacts throughout both the Raging River and the Cedar River watersheds. Wetlands, salmon grounds and fisheries, and forest habitat--all of which are at risk --would be impacted by such a plan.

Sincerely,


Ceci Cordova

386-001 Please see the response to Comment 340-003.

386-002 Please see response to Comments 340-002 and 357-003.



4250 NE 88th Street
Seattle, WA 98115
1 September 2001

To the attention of: Lou Driessen, Project Manager
C/o Communications
Bonneville Power Administration - KC -7
Post Office Box 12999
Portland, OR 97212

Dear Project Manager:

Please, build any new power lines through the Cedar and Raging River watersheds on already existing towers.

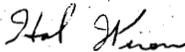
Also, please offer a new Environmental Impact Statement that supplies a substantive cumulative effects analysis of the proposal to build in the Cedar River Watershed, along with additional alternatives. The current plan--to clearcut a swath of forest (currently protected from logging) within the watershed and to construct new road--would have severe, extensive impacts throughout both the Raging River and the Cedar River watersheds. Wetlands, salmon grounds and fisheries, and forest habitat--all of which are at risk --would be impacted by such a plan.

Sincerely,



ALICE WIREN

and



HAL WIREN

387-001 Please see response to Comment 386.

387-001

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-388
RECEIPT DATE: SEP 04 2001

Aug. 29, 2001

Dear Lou Drivesson,
We, the residents of Seattle, WORKED HARD TO HAVE THE Cedar River and The Raging River watersheds protected FROM TREE CUTTING AND FROM ROAD BUILDING AND TO HAVE PAST DAMAGE RESTORED SO WE CAN BE ASSURED OF A SAFE WATER SUPPLY

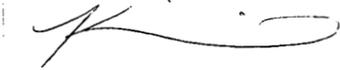
388-001

YOU ALREADY HAVE A RIGHT OF WAY THROUGH THESE WATERSHEDS THAT YOU CAN USE FOR YOUR EXPANSION OR YOU CAN USE ALTERNATE ROUTES OUTSIDE OF THE WATERSHEDS.

388-002

I STRONGLY OPPOSE THE PROPOSED POWERLINE THAT WILL FURTHER DESTROY OUR WATERSHEDS; ON WHICH THERE HAS BEEN NO OFFER OF REPLACEMENT FOREST AND WETLANDS; AND FOR WHICH IMPACT ANALYSIS AND ALTERNATIVES HAVE NOT BEEN PREPARED.

Sincerely

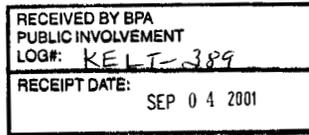


TABITHA KIESEL
109 NW 76
Seattle WA 98117

388-001 Please see the response to Comment 340-003.

388-002 See response to Comment 340-002. The SDEIS identified the impacts of the Proposed Action and the impacts of the alternatives to the Proposed Action, including the No Action Alternative. The Administrator of BPA will use the SDEIS and the Final EIS to make a decision on the Proposed Action.

Telephone comment by Ginny Kuehn
9/4/01



Doug Lawrenson
3232 Conkling Place W.
Seattle, WA 98119
(206) 283-4350

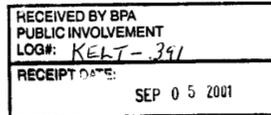
389-001

I object strongly to the idea that this power line would go through Seattle's watershed, which has just gone through extensive public process to keep the city river watershed undisturbed and clean. The idea that old growth forests and the watershed maybe cut down for this power line is absolutely appalling and I am hoping that when you come up with the final scope of the EIS that it will include routes that avoid construction and maintenance in Seattle's watershed, not just Seattle's watershed. Seattle supplies water too much of the regions from this watershed. So I am absolutely adamant that you need to find routes that go outside the watershed and that don't cut down old growth forests.

Thank you.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Tuesday, September 04, 2001 4:39 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Cedar River Watershed



-----Original Message-----
 From: James T Michel [mailto:micheljt@hotmail.com]
 Sent: Tuesday, September 04, 2001 3:34 PM
 To: lcdriessen@bpa.gov
 Subject: Cedar River Watershed

Lou,

391-001

It has come to my attention that the BPA is considering cutting a new 9 mile swath of the cedar river watershed to run new power lines. I am very opposed to this proposal. Currently, lines already exist, and running additional lines along the already existing corridor would be considerably less invasive than removing trees from one very important watershed to further scar this unique wildlife habitat.

Please do not Cut any more in the Cedar River Watershed.

Best Regards,

James T. Michel
3018 26th Ave W
Seattle, WA 98199

389-001 Please see response to Comment 382-018.

391-001 Please see the response to Comment 340-003.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Tuesday, September 04, 2001 5:17 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Biodiversity Project, Kangley - echo lake

APPROVED BY BPA
PUBLIC INVOLVEMENT LOG#: <i>KELT-392</i>
RECEIPT DATE: SEP 05 2001

-----Original Message-----

From: Jill McGrath [mailto:cbcnews@cascade.org]
Sent: Tuesday, September 04, 2001 4:58 PM
To: lcdriessen@bpa.gov; coment@bpa.gov
Subject: Biodiversity Project

To Lou Driessen, Project Manager:

Greetings,

I am writing to ask that the BPA not put any new lines on the existing towers. I understand that the BPA wants to build 9 miles of new 500 kilovolt line through the Cedar and Raging River watersheds. This would include 1.5 miles of new road construction. This plan would destroy forests recently protected by the City of Seattle.

Cutting of trees could be as far as 200' from the powerline, especially if it is old growth forest...not the 75' as is implied in the summary.

Would BPA build a powerline through Mt. Rainier National Park? Then why does it propose to through our watersheds?

I support adding additional circuits to towers in the existing corridor; I support having a new EIS with needed information on any decision.

In any alternative chosen, BPA must fully mitigate the impacts of the projects. That means replacing any forests that are cut.

Sincerely,

Jill McGrath
6743 Palatine Ave N
Seattle, WA 98103

392-001

392-001 Please see the response to Comment Letter 361.

Kuehn, Ginny -KC-7

PUBLIC INVOLVEMENT	
LOG#:	KELT-353
RECEIPT DATE:	SEP 05 2001

From: Driessen, Laurens C - TNP-3
Sent: Tuesday, September 04, 2001 5:18 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Raging Cedar (Kangley-Echo Lake Transmission) Line

-----Original Message-----

From: Donald Potter [mailto:potter.d@ghc.org]
Sent: Tuesday, September 04, 2001 4:18 PM
To: lcdriessen@bpa.gov
Subject: Raging Cedar (Kangley-Echo Lake Transmission) Line

Dear Mr. Driessen,

I have been aware of the proposed Raging Cedar Powerline proposal for several months now, and am distressed that it would cause a number of environmental problems.

First, it destroys forests, including Seattle's watershed, which is now protected from logging. The loss of a forest is more than just a loss of timber revenue, but is a permanent loss of habitat, which is rapidly becoming scarce in this highly populated portion of the state.

Second, no mitigation of replaced forests is included in the proposal, and should be.

Third, the area encompasses a unique lowland forest, including old growth forest. Such projects fragment the forest and connectivity so vital for the survival and migration of species, both flora and fauna.

Please, do the following:

- add additional circuits to towers in the existing corridor
- replace any forests or wetlands that are damaged
- complete a new EIS with substantive cumulative effects analysis and additional alternatives, including conservation.

Thank you

Respectfully yours,

Donald E. Potter, MD
 3823 140 th Ave NE
 Bellevue, WA 98005-1473
 e-mail: potter.d@ghc.org

393-001

393-001 Please see the response to Comment Letter 361.

Kuehn, Ginny -KC-7

From: Edvondrasek@aol.com
Sent: Wednesday, September 05, 2001 6:30 PM
To: lcdriessen@bpa.gov
Cc: comment@bpa.gov
Subject: (no subject)

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-396
RECEIPT DATE: SEP 06 2001

Dear Sir,
2001

September 4,

I am writing to voice my strong opposition to your proposed Raging Cedar Powerline Project.

I worked hard with the Pacific Crest Biodiversity Project (where I serve on the Board of Directors) and the Protect Our Watershed Alliance to move the City of Seattle to protect the watershed and the forests and fisheries it holds, and to create the HCP to which the City is accountable. This proposed powerline would violate the HCP, which disallows any logging of the type required by this project in our watershed. This project should not even be considered in this protected area. No logging is legal in our watershed and the goals of the HCP are to remove roads not to cut new ones.

I demand that BPA drop this proposal immediately and consider legal (and ecologically sound) alternatives, such as adding additional circuits to towers in existing corridors. I request a new EIS with information including a substantive cumulative analysis and the addition of conservation alternatives.

Please keep me informed about the proposed project. Thank you.

Sincerely,
Chris Vondrasek
4742 35th Avenue S.
Seattle, WA 98118
email: bp649@scn.org

396-001

396-001 Please see responses to Comment Letter 361.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Monday, September 10, 2001 7:52 AM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Mr. Dreissen's reply, Kangley - Echo Lake

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-397
RECEIPT DATE:
SEP 10 2001

-----Original Message-----

From: Judy Lightfoot [mailto:jhlightfoot@hotmail.com]
 Sent: Friday, September 07, 2001 12:04 PM
 To: comment@bpa.gov; lcdriessen@bpa.gov
 Subject: Mr. Dreissen's reply

Dear Mr. Dreissen,
 Either you are being disingenuous for PR purposes or you didn't read my message carefully. I did not ask that the same lines or circuits be used for additional power. Another possible option is to put up new towers in the

same clearcut swaths, if necessary slightly widened, instead of clearcutting new swaths in different areas. Please be careful to understand public comments on this important issue.
 Thanks,
 Judy Lightfoot

>
 >Date: Mon, 3 Sep 2001 21:15:34 -0700
 >From: "Driessen, Laurens C - TNP-3" <lcdriessen@bpa.gov>
 >Subject: RE: Bonneville Power clearcuts
 >
 > [The following text is in the "iso-8859-1" character set.]
 > [Your display is set for the "US-ASCII" character set.]
 > [Some characters may be displayed incorrectly.]
 >
 >Thank you for your comments. We will include them along with those from
 >others to determine the selection of the final plan/alternative and
 >mitigation measures. We are also concerned about the impacts to the
 >natural
 >environment and are looking at ways to mitigate as indicated in the
 >Draft
 >EIS. Concerning your suggestion of putting the new line together with
 >the
 >existing line, we cannot do that for reliability reasons, also
 >described in
 >the DEIS. It would be to big of a disaster to our electrical system to
 >have
 >both lines go out at the same time as is more likely in a double
 >circuit
 >situation.
 >
 > Lou
 >

>-----Original Message-----

>Dear Mr. Dreissen:
 >
 >I am deeply concerned about the clearcut that the Bonneville Power
 >Administration proposes to make within the Cedar River Watershed.
 >Instead, why not improve the existing corridor? Bonneville could add
 >additional circuits to the towers in the present corridor instead of
 >clearcutting for a new corridor. In any case, an Environmental Impact
 >Statement that includes conservation options is absolutely essential.
 >
 >Sincerely,
 >
 > Doug Schuler and Terry Frankel
 > Seattle
 >Judy Lightfoot, PhD
 >1326 NE 62nd St
 >Seattle, WA 98115
 >206/522-2269
 >http://www.homestead.com/judy_lightfoot

397-001

397-001 BPA is proposing to construct a new 500-kV line immediately adjacent to the existing 500-kV line from near the tap point to the Echo Lake Substation. Paralleling the existing 500-kV line would take advantage of the existing access road system already in place, and also the clearing that has taken place for the existing line. The reason that the second line could not be located within the same 150-foot wide right-of-way is that it would violate BPA design standards. Right-of-way widths are established to ensure safe, reliable operation of the lines. The existing 500-kV line is located in the center of the 150-foot-wide right-of-way. The proposed line also would be located in the center of a 150-foot-wide right-of-way; therefore if the line were built the two lines would be 150 feet apart. This is the minimum distance that the two lines could be operated safely and reliably. Section 2.3.8 of the SDEIS examines use of double-circuit towers. Also see responses to Comments 426-002 and 1459-009.

A non-transmission alternative that included conservation has been fully analyzed in the SDEIS. See Section 2.2.9 and Appendix J of the SDEIS.

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-399</i>
RECEIPT DATE: SEP 10 2001

6528 - 50TH AVENUE NE
SEATTLE, WA 98115
SEPTEMBER 1, 2001

LOU DRIESSEN, PROJECT MANAGER
COMMUNICATIONS
BONNEVILLE POWER ADMINISTRATION - KC-7
POST OFFICE BOX 12999
PORTLAND, OR 97212

DEAR PROJECT MANAGER:

399-001

PLEASE BUILD ANY NEW POWER LINES THROUGH THE CEDAR AND
RAGING RIVER WATERSHEDS ON ALREADY EXISTING TOWERS.

399-002

ALSO, PLEASE OFFER A NEW ENVIRONMENTAL IMPACT STATEMENT THAT
SUPPLIES A SUBSTANTIVE CUMULATIVE EFFECTS ANALYSIS OF THE PROPOSAL TO
BUILD IN THE CEDAR RIVER WATERSHED, ALONG WITH ADDITIONAL
ALTERNATIVES. THE CURRENT PLAN TO CLEARCUT A SWATH OF FOREST
(CURRENTLY PROTECTED FROM LOGGING) WITHIN THE WATERSHED AND TO
CONSTRUCT NEW ROAD--WOULD HAVE SEVERE, EXTENSIVE IMPACTS
THROUGHOUT BOTH THE RAGING RIVER AND THE CEDAR RIVER WATERSHEDS.
WETLANDS, SALMON GROUNDS AND FISHERIES, AND FOREST HABITAT--ALL OF
WHICH ARE AT RISK --WOULD BE IMPACTED BY SUCH A PLAN.

SINCERELY,


CARL PRUZAN


MARIAN PRUZAN

399-001 Please see responses to Comment Letter 361.

399-002 Please see SDEIS for more information about cumulative impacts.



Pacific Crest Biodiversity Project
 4649 Sunnyside Ave N #321
 Seattle, WA 98103

Ph: (206)545-3734
 Fax: (206)545-4498
 Email: pcbpinfo@pcbp.org
 Web: www.pcbp.org

Lou Driessen, Project Manager
 Bonneville Power Administration
 PO Box 3621
 Portland, Oregon 97208

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-400
RECEIPT DATE: SEP 10 2001

August 30, 2001

RE: Kangley - Echo Lake Transmission Project

Dear Mr. Driessen:

The Pacific Crest Biodiversity Project, a nonprofit organization with approximately 2,000 members, is dedicated to the protection and restoration of forest ecosystems in the Pacific Northwest. We played a key role in facilitating public involvement in the development of the Cedar River Habitat Conservation Plan and advocated an end to the commercial timber sale program within the watershed.

Just over two years ago, in a unanimous and historic vote, the Seattle City Council voted to end commercial logging in the Cedar River Watershed. The vote was a conclusion to a remarkable public process in which more than a thousand people turned out to hearings and hundreds submitted comments. When the process began, the city was not planning to consider an alternative with no commercial logging. In the end, overwhelming public support for making 100% of the watershed an ecological reserve and a willingness of customers to pay an additional \$4 per average household per year led to the about-face. The city also expanded its goals for road decommissioning based on public input.

Especially within this context, proposals to cut trees or build roads in the watershed for anything but water quality or ecological integrity must be taken very seriously. It's as if the agency were proposing to cut a swath through an important park or wildlife refuge. We don't see how such a project could be consistent with Seattle's HCP for the watershed and are disappointed not to see a thorough discussion of this issue in the Draft EIS. We feel that the public should have the opportunity to see what the National Marine Fisheries Service and US Fish and Wildlife have to say about conflicts or consistency with the HCP before the project reaches the Final EIS stage.

About conservation: this was given minimal treatment in the DEIS. We do not feel BPA have given the public adequate information about the potential for conservation to

400-001

400-001 BPA agrees that the Cedar River Watershed is a very valuable water source and wildlife resource, and that any intrusions into the area should not occur lightly, or without good cause. The DEIS and SDEIS was sent to both USFWS and NMFS, who were invited to comment on the proposed transmission line. We have initiated formal consultation with USFWS and have concluded informal consultation with NMFS. See Appendix U.

The HCP is a plan that SPU had to prepare to build the Landsburg fish ladder and return chinook salmon to the upper Cedar River. It is a plan that was entered into between the landowner, Seattle Public Utilities, two state agencies, Washington State Department of Ecology and the State Department of Health, and the two federal agencies that have responsibilities under the Endangered species Act, the Fish and Wildlife Service and the National Marine Fisheries Service. As a federal agency, BPA does not prepare habitat conservation plans (HCPs), but instead is coordinating with these federal agencies under Section 7 consultation.

While SPU's HCP is not applicable to BPA's activities, BPA is subject to the Coastal Zone Management Act, which requires federal agencies to be consistent, to the extent practicable, with all applicable local, state and federal plans and programs in exercising its mission as the federal power marketing agency in the Northwest.

BPA contacted NMFS and USFWS earlier on in the project to request their participation as "cooperating agencies" under the National Environmental Policy Act of 1969, as amended. Both agencies declined. Subsequently, in early summer 2001, BPA prepared a biological assessment that identified what impacts, if any, would be created for listed and candidate species, as a result of the proposed project. BPA subsequently prepared an addendum to the BA, submitting additional information requested by FWS after receiving a letter from them stating that it could not concur in BPA's finding of no affect on the northern spotted owl, and requested that BPA enter into formal consultation with the agency. NMFS subsequently concluded that since the Proposed Action incorporates avoidance and minimization measures into the project, the agency can expect the effects of the action "to be discountable or insignificant."

400-002 | obviate the need for this project. When the call went out from local government agencies to conserve energy during the acute phase of the power crunch, the response was swift and significant. How much would the region need to conserve to avoid the brownouts you project within a few years? In a supplemental EIS, please thoroughly evaluate a conservation option and allow the public to determine whether the targets are attainable.

400-003 | We also do not feel it was appropriate for BPA to reject from further consideration the option of using the existing towers for the new lines. If you can deliver the power you believe is needed without clearing more forest or building more roads, please thoroughly analyze this alternative in supplemental EIS.

400-004 | We feel that any option that clears forest or builds roads in the Cedar River Watershed is a nonstarter. That said, the analysis for any alternative that does contemplate destroying habitat must include mitigation measures and must factor in the associated costs. In our view, appropriate mitigation requires that any forest cleared be replaced in kind and that any new road miles be accompanied by the decommissioning of an equal number of road miles within the same watershed. To account for fragmentation caused by a newly cleared swath, additional replacement forest will likely be required for adequate mitigation.

400-005 | Please issue an additional EIS that thoroughly analyzes the potential for conservation, alternatives prematurely rejected, and the relationship of the project to Seattle's HCP. We urge Bonneville Power Administration to present a preferred alternative which requires no clearcutting or roadbuilding within the Cedar River Watershed. To do otherwise flies in the face of the will of Seattle-area citizens and the historic, fifty-year plan enacted just two years ago.

Sincerely,



David Atcheson
Vice President

Therefore, NMFS concurred with BPA's effect determination of "may affect, but not likely to adversely affect" for the Puget Sound Chinook and their designated critical habitat. BPA has, therefore, concluded informal consultation with NMFS.

BPA has entered into formal consultation with the FWS. BPA will conclude this formal consultation with the agency prior to initiating any construction activities.

400-002 Please see response to Comment 409-002.

400-003 Please see the response to Comment 340-003.

400-004 See response to Comment 340-002.

With respect to the road issue, BPA would be building about 1-1/2 miles of new road within the Cedar River Municipal Watershed to build, operate and maintain the line. About half a mile of road in the CRW that crosses wetlands would be removed from service. Although BPA would be acquiring the rights to build these roads, it would have no authority to abandon any existing roads within the Cedar River Watershed, outside of those that it presently uses to operate and maintain the existing Raver-Echo Lake 500-kV line located there.

400-005 Please see response to Comment 357-003.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Monday, September 10, 2001 5:05 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Mr. Driessen's reply

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-401</i>
RECEIPT DATE: SEP 11 2001

-----Original Message-----

From: Judy Lightfoot [mailto:jhlightfoot@hotmail.com]
 Sent: Monday, September 10, 2001 11:03 AM
 To: lcdriessen@bpa.gov
 Subject: RE: Mr. Driessen's reply

401-001

Thank you for this explanation. How wide is the existing clearcut? How wide will the widened clearcut be? Thank you for your attention and time--
 Judy Lightfoot, PhD
 1326 NE 62nd St
 Seattle, WA 98115
 206/522-2269
http://www.homestead.com/judy_lightfoot

>From: "Driessen, Laurens C - TNP-3" <lcdriessen@bpa.gov>
 >To: "'Judy Lightfoot'" <jhlightfoot@hotmail.com>
 >Subject: RE: Mr. Driessen's reply
 >Date: Mon, 10 Sep 2001 07:51:49 -0700
 >
 >The preferred plan is to parallel immediately next to the existing line >thereby reducing the amount of clearing needed as stated in the Draft EIS.
 >We cannot put the new line in the existing R/W without doing any clearing.
 >There is just not enough room. The only way to put the new line in the >existing clearing is to remove the existing line and replace it with towers
 >that would support the existing line and the new line such that both >circuits would be on the same structure. That would be unacceptable from a
 >reliability standpoint. So the preferred option is doing what you are >suggesting, utilizing the existing right of way to the extend possible and
 >minimizing clearing. In addition, we normally take any tree outside of the
 >right of way that could potentially fall into the new line. In this case
 >through the watershed, we are planning to take only those trees that are
 >unhealthy and leaning heavily towards the line and are most likely to fall
 >down in a heavy wind. All healthy trees would be allowed to remain. I
 >think we have a preferred option that takes into account all the aspects
 >and
 >concerns while meeting the needs of the project and minimizing the
 >environmental impacts to the watershed, other natural environments and
 >people impacts. Hope this helps.
 >
 > Take care
 >
 > Lou

401-001 The existing Raver-Echo Lake 500-kV Transmission Line is located on a 150-foot-wide right-of-way, the same width as the proposed right-of-way.

August 31, 2001
Mr. Lou Driessen

"Snoqualmie Preservation Initiative," which will permanently conserve the forests of the Raging River basin from future development and impacts. We will soon secure public purchase of the 350-acre Trillium parcel in Section 26 that BPA's power line now passes through. This entire basin, as well as Tiger Mountain to the west, the Cedar River Watershed to the south, and Rattlesnake Mountain to the east have been deliberately conserved and will be managed as permanent forestland. Proposals for expanding power line corridors through any of these forests must carefully consider and absolutely minimize potential impacts to the multiple scenic, environmental, recreational, habitat, and forest product benefits that these forests provide. Much of the lowland forests of the Puget Sound region have been fragmented or lost; it is critical to carefully protect what remains.

402-004

Thus, the Greenway Trust is concerned that the DEIS for the Kangley-Echo Lake power line expansion makes no mention of mitigation for the permanent loss of forestland that the project proposes. We estimate the minimum, permanent loss of forest cover to be 150' (proposed corridor width) x 9 miles (proposed length) = 164 acres. In an era of salmon listings, new measures being taken to protect native vegetative cover and heightened sensitivity to the importance of forests for wildlife habitat, water quality and quantity, recreation, scenic values, air quality and carbon sequestration, and more, BPA should permanently replace the 164 acres of forest lost to clearing and "development" with a minimum of 164 forested acres elsewhere. Since the impacts of the proposed project are within the Greenway corridor, we believe that BPA should provide replacement forestlands within the corridor. This should be factored into the project costs and could be accomplished via a conservation easement or fee acquisition. The Trillium parcel, now held by the Trust for Public Land until public funding becomes available, offers an immediate mitigation opportunity if BPA wishes to participate in its public purchase.

402-005

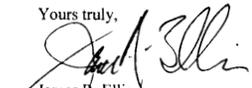
Other proposals for development in this region have required compensating mitigation for loss of forestland and habitat. Most notably, King County has a "4:1 program" which requires a developer to donate 4 acres to public ownership for every one acre rezoned into a higher urban zoning status. The City of Issaquah has utilized an "Urban Village" designation to cluster proposed developments while permanently protecting 75% of each site as public forestland. The Cedar River Watershed implemented a new Habitat Conservation Plan to protect and restore its old-growth forest characteristics. These, and other programs have set a precedent that BPA should follow when planning for any new power line corridor in this region.

402-006

BPA's proposed approach to "danger trees" is another issue of concern. Cutting any tree within range of the powerline that MIGHT have a future impact is not acceptable. Just as the Cedar River Watershed is not allowing this approach across their land, BPA should take a similar approach along the entire 9-mile length, and use the "stable tree" approach everywhere. We also believe mitigation should be provided for any trees that are cut outside of the 150' proposed BPA ROW.

402-007

A great deal of effort and public investment has gone into creating the Mountains to Sound Greenway corridor and permanently protecting its scenic forested character. It should be the policy of BPA to minimize and mitigate any negative impacts its projects may bring to this corridor. Thank you for the opportunity to comment.

Yours truly,

James R. Ellis
President

402-005 In response to this and similar comments from government agencies, BPA is proposing to provide compensatory mitigation to offset impacts as a result of the Proposed Action. Please see response to Comment 340-002.

402-006 Please see response to Comment 340-004.

402-007 Comment noted.

Kuehn, Ginny -KC-7

From: steve dubinsky & dina winkel [stevdina@oz.net]
Sent: Tuesday, September 11, 2001 9:14 PM
To: lcdriessen@bpa.gov, comment@bpa.gov
Subject: Kangley-Echo Lake transmission project

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KE-LT-403
RECEIPT DATE: SEP 12 2001

To Whom It May Concern -

I strongly disapprove of the plan to install 9 miles of new transmission lines through the Cedar River and Raging River watersheds.

I am concerned about the wildlife in this untouched area, which is vulnerable and can't fight back. We should know better than to intrude further into their habitat.

I am also concerned about the quality of the water that supplies the city. Construction of transmission lines will create silt and pollute runoff into the rivers and lakes. Erosion will strip the top soil of nutrients and adversely impact vegetation and wildlife.

PLEASE modify existing powerlines to carry the extra load, and leave the watershed alone.

Dina Winkel.

403-001

403-002

403-001 With respect to the comment that the commenter strongly disapproves of the proposal to construct the power line through the Cedar and Raging River watersheds, this comment is noted.

BPA is also concerned about the impacts of the proposed project on both the natural and human environment including impacts on fish and wildlife. Our SDEIS identified the impacts of the Proposed Action, and alternatives on the fisheries and wildlife resources (see Sections 4.6 and 4.7 of the SDEIS), and has also identified mitigation measures that would eliminate or at least minimize impacts identified.

We do not expect that any pollutants would enter surface waters as a result of the proposed project. BPA will comply with the National Pollutant Discharge Elimination System, and develop a storm water pollution prevention plan, prior to the onset of any construction activities. BPA will construct erosion control devices to prevent any sediment from entering surface waters, as required by the Clean Water Act, and the general permit issued by the state of Washington, Department of Ecology. To ensure that no pollutants enter ground water, BPA will leave the erosion control measures in place until the site is 70 percent stabilized, as required by the permit. Additionally, all disturbed areas would be reseeded following the completion of construction activities to reduce erosion.

403-002 Please see the response to Comment 340-003.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
 Sent: Wednesday, September 12, 2001 7:59 AM
 To: Kuehn, Ginny -KC-7
 Cc: Lynard, Gene P - KEC-4
 Subject: FW: Cedar River Powerline, Kangley - Echo Lake

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: K E L J - 404
RECEIPT DATE: SEP 12 2001

-----Original Message-----

From: sierrasb@oz.net [mailto:sierrasb@oz.net]
 Sent: Monday, September 10, 2001 3:02 PM
 To: lcdriessen@bpa.gov
 Subject: Cedar River Powerline

TO:
 Bonneville Power Administration
 PO Box 3621
 Portland, OR 97208
 lcdriessen@bpa.gov

FROM:
 Shelly Baur
 3926 SW Southern St.
 Seattle, WA 98136

DATE: September 10, 2001

Dear BPA:

Seattle celebrated the protection of the Cedar River watershed, which I had thought would be protected for 50 years. Now, I find that BPA is undermining this protection with a proposed powerline. I want this to stop.

404-001

1. This powerline is not necessary. BPA has not done all it can and should to conserve energy. Energy conservation was not pursued wholeheartedly during the 90s until the California energy crunch, and building powerlines through vital watersheds is not the answer to catching up.

404-002

2. I don't believe all alternatives to such a powerline have been exhausted such as lines through corridors already cut.

404-001

3. Your environmental impacts were not adequately assessed. I would like a new environmental impact statement done that looks at the watershed and its areas with the affects of all factors represented over time. This assessment should include alternatives.

404-004

4. You have not even attempted adequate mitigation for the proposed damage. If in the future such a line goes through, the forest, wetlands, riparian corridors, etc. should bought from private landowners in at least a 2 for 1 exchange so the public is compensated for its loss. This is necessary also in part so BPA has the full cost of such a project as part of its cost/benefit analysis. If included, I believe that the current costs outweigh the benefits of the project as proposed and BPA will instead up the ante on conservation and alternative transmission measures.

So, do not build the line at this time.

Sincerely,

Shelly Baur

404-005

P.S.: Sorry I missed the official public comment period, but I do not feel BPA adequately advertised its intentions to the public, knowing how outraged we would be if it were well known. In future, I would like to see BPA advertise this more.

404-001 See response to Comment 349-001.

404-002 The Proposed Action would be next to an existing corridor.

404-003 See response to Comment 357-003.

404-004 See response to Comment 340-002.

404-005 Comments noted. BPA does its best to notify all those who would either be affected by or interested in the Proposed Action. It does so early on after the system planners have identified a need. The comment period was extended from August 15th to September 4th, 2001. BPA tries to address all comments received even those submitted after the "official" review period has ended, to the extent possible.

RECEIVED BY BPA
 PUBLIC INVOLVEMENT
 LOG#: KELT-406
 RECEIPT DATE: SEP 18 2001

406-001

DEAR MR. DRIESSEN,

PLEASE CONSIDER ENCOURAGING BPA TO PURCHASE
 AND PRESERVE AN EQUIVALENT AMOUNT OF
 LOW ELEVATION FORESTLAND THAT WOULD REPLACE
 THE LOSS OF HABITAT IN CEDAR RIVER FOREST.
 4 OUT OF 5 SALMON AGREE... IT'S THE RIGHT THING
 TO DO!



RANDY SILL
 2426 WESTLAKE
 SEATTLE, WA. 98149



LOW DRIESSEN
 BONNEVILLE POWER ADMINISTRATION
 P.O. Box 3621
 PORTLAND, OR 97208-3621 TWP-3



406-001 Comment noted. BPA has purchased a 352-acre parcel formerly owned by the Trust for Public Land. This parcel is located immediately adjacent to and north of the Cedar River Municipal Watershed. The proposed power line would bisect the parcel. See also the response to Comment 340-002.

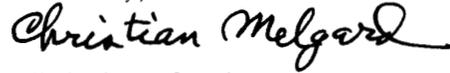
RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>REL-407</i>	1619 21st Ave. E. Seattle, WA 98112 September 9, 2001
RECEIPT DATE: SEP 27 2001	

Mr. Lou Driessen
 Bonneville Power Administration
 P.O. Box 3621
 Portland, OR 97208-3621

Dear Mr. Driessen:

I thought that we locals had secured our watershed against any further logging. The sentiment against the Seattle Water Department's plan to keep rates down by continuing logging in the watershed ultimately prevailed. I assumed that was the end of it. Now it appears that the BPA wants to cut a wide swath through the watershed for a new power line. I am sure there are other routes for such a line. I hope you find such an alternative. I am opposed to the current BPA proposal.

Sincerely,



Christian Melgard

407-001

407-001 Comment noted.

1932 Eleventh Avenue East
Seattle, Washington 98102

September 10, 2001

Mr. Lou Driessen
Bonneville Power Administration
P.O. Box 3621
Portland, WA 97208-2621

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-408</i>
RECEIPT DATE: SEP 27 2001

Dear Mr. Driessen:

408-001

I am writing you to express my concern about BPA's intention to build a new power line in eastern King County. I am afraid it will destroy hundreds of acres of protected forest in the City of Seattle's Cedar River watershed. I understand that it will cross the salmon bearing Raging River and the future salmon bearing Cedar River. I also understand BPA intends to build new roads and expand the Echo Lake substation.

408-002

Mr. Driessen, I do not feel the Bonneville Power Administration has fully investigated the potential environmental damage this project will cause. Perhaps your Environmental Impact Study has not gone far enough. Do you fully understand the importance of the Cedar River forest? Or the cumulative effects of power lines which destroy and fragment OUR forests?

408-003

The construction of new power lines should require the replacement of damaged habitat. BPA should be required to acquire and preserve an equivalent amount of forestland elsewhere, perhaps some that is at risk of being developed commercially. I feel that BPA should bear the full REAL cost of building these power lines and not ignore the loss of important habitat for forest animals.

Please take our comments into consideration as you formulate BPA's strategy for expanding power service thru OUR forests.

Very truly yours,



David N. James

408-001 Comment noted.

408-002 Comment noted.

408-003 Please see response to Comment 340-002.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, September 27, 2001 3:10 PM
To: Kuehn, Ginny -KC-7; Lynard, Gene P - KEC-4
Subject: FW: Please Protect the Cedar River Watershed

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KILT-410
RECEIPT DATE:
SEP 27 2001

-----Original Message-----

From: Lisa Ramirez [mailto:lr Ramirez@foe.org]
Sent: Thursday, September 27, 2001 2:24 PM
To: jim.compton@ci.seattle.wa.us; richard.conlin@ci.seattle.wa.us;
jan.drago@ci.seattle.wa.us; margaret.pageler@ci.seattle.wa.us;
peter.steinbrueck@ci.seattle.wa.us; heidi.wills@ci.seattle.wa.us;
diana.gale@ci.seattle.wa.us; mayors.office@ci.seattle.wa.us;
lcdriessen@bpa.gov
Subject: Please Protect the Cedar River Watershed

To My Elected Officials,

410-001

Please do not allow the Bonneville Power Administration to cut into our Cedar River Watershed. Their plan to clearcut a 9-mile strip of forest would adversely impact the ecosystem and our drinking water -- all for a powerline. This is unacceptable, especially since BPA has not even provided any other viable options.

410-002

You already know the importance of this watershed. The Cedar River Watershed's fragile ecosystem is currently protected under an HCP. This area was threatened a few years ago by another logging proposal. To everyone's relief, the ecosystem was left in tact. Please do not allow the logging to go through this time!

410-003

We must protect what is left, for us, for future generations, and for the health of the planet. Please do the right thing and oppose BPA's destructive plan.

Thank you,
Lisa Ramirez
Seattle, WA

410-001, -002, and -003 Comments noted.

Kuehn, Ginny -KC-7

From: Micki Larimer [mickilarimer@home.com]
Sent: Wednesday, October 03, 2001 5:39 PM
To: comment@bpa.gov
Subject: Kangley-Echo Lake Transmission Line

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-412
RECEIPT DATE: OCT 04 2001

Dear BPA officials,

In the wake of the September 11th tragedies, Americans are more aware than ever of the potential for contamination of our air and water supplies. While the threat of extreme contamination from radicals outside our country looms large in the national psyche, the likelihood of our slowly poisoning ourselves must still be protected against. I urge you as a fellow Americans and representatives of our great country to protect the water supply of the Northwest's economic and cultural center. Seek out and implement alternative routes for the Kangley- Echo Lake Transmission line that do not pose a threat to the Cedar River Watershed, or other vital water sources.

Sincerely,

Lari M. Larimer
Bellevue, WA

Kangley-Echo Transmission Project

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-414
RECEIPT DATE: OCT 16 2001

Telephone comment by Ginny Kuehn
1/16/01

Eldon Ball
Phone # 206-366-8405

I am calling in regard to the proposed transmission line through the Cedar River watershed. The transmission lines that were built across the Cascades from the Columbia River dams to western Washington were probably built in the 40's, 50's, 60's or 70's. I don't think there is anything much newer than that. It seems to me that with four or five transmission lines across Stampede Pass, four across Stevens Pass, one across Snoqualmie Pass that perhaps you could update some of the old lines that were 110 or 230 kilovolt and make them 500 kilovolt lines and don't track through additional watershed areas that are old growth forest that is pristine and shouldn't be damaged, maybe you could use some of your existing rights-of-way and just use them more efficiently.

I would like a reply.

Thank you.

412-001 Comment noted. Though BPA's Proposed Action would cross through the Cedar River Municipal Watershed, BPA does not believe that this line is a threat to the Watershed. BPA is undertaking extraordinary measures to ensure that it does not, threaten the watershed, including providing compensatory mitigation to replace that forest habitat that would be converted to non-forest habitat following project implementation. See response to Comment 340-002.

414-001 Please see the response to Comment 340-003.

412-001

414-001

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, October 18, 2001 12:16 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P -KEC-4
Subject: FW: Kangley comment

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT-415 RECEIPT DATE: OCT 19 2001
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Another comment

-----Original Message-----

From: Hilary B. Bramwell [mailto:hilarybb@u.washington.edu]
 Sent: Thursday, October 18, 2001 9:31 AM
 To: florrainebodi@bpa.gov; comment@bpa.gov
 Subject: Cedar river watershed

Hi. My name is Hilary Bramwell, and I am a resident of Seattle. I'm very concerned with the future health of MY DRINKING WATER. I am writing to say that I absolutely am against the BPA's plan to build through the watershed area. Please realize that INDIVIDUALS (1.3 million of them) will be deeply affected. I'm sorry, but the purity of the water we have available to put in our bodies is more important than selling power to Canada. If you DON'T think it is, then you have some whacked-out priorities in my opinion. If you go through with the plan, I'm going to have to send the federal government a bill for my bottled water costs. I know they won't pay it, but hey, I'm really pissed off, and want to make people realize the implications of building transmission lines through the watershed area. Please consider the human element here, as well as the environmental one. What BPA is planning just isn't right or fair. Thanks for listening.
 sincerely, Hilary Bramwell

415-001

415-001 Comment noted.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG# <u>KEC-416</u> RECEIPT DATE: <u>OCT 19 2001</u>
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From: Lynard, Gene P - KEC-4
Sent: Wednesday, October 17, 2001 11:12 AM
To: Kuehn, Ginny -KC-7; Taves, John - KR-7C
Subject: FW: Regarding the Cedar River Watershed

-----Original Message-----

From: Michael Shank [mailto:michaels@pcbp.org]
Sent: Tuesday, October 16, 2001 3:09 PM
To: 'gplynard@bpa.gov'
Subject: Regarding the Cedar River Watershed

Greetings, Gene!

My name is Michael Shank and I'm serving as the Membership Coordinator for Pacific Crest Biodiversity Project. The Biodiversity Project spearheaded Protect Our Watershed Alliance, an environmental coalition that protected the Cedar River Watershed from commercial logging three years ago.

I have a few questions that have gone unanswered by Lou Driessen and I thought you might be able to answer them.

We (along with SPU and the Seattle City Council) have asked that BPA pursue other viable options outside the Cedar River Watershed and your reasons are short and lack full articulation. Your first reason/excuse given in why you cannot enter Maple Valley is that you cannot take turn the power off long enough to replace the lines. Is it not true that you could replace half of the line one year and the rest of the line the following year?

The second reason/excuse you give for not using Maply Valley is that two vacant lines are needed for other purposes. Could you explain those other needs? BPA is supposed to do such things in the DEIS and you haven't. I'd appreciate it if you would.

Thank you for your time.

warm regards,

Michael

Michael Shank
Membership Coordinator

-Protecting and restoring forest ecosystems in the Pacific Northwest-

Pacific Crest Biodiversity Project
4649 Sunnyside Avenue North #321
Seattle, WA 98103

Phone: 206.545.3734 ext. 11
Fax: 206.545.4498
Email: michaels@pcbp.org
Web: <http://www.protectandrestore.org>

416-001 and -002 Please see new information included in the SDEIS and the response to Comment 382-018.

416-001

416-002

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, October 18, 2001 5:15 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: clear cut

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: <i>KELT-417</i>
RECEIPT DATE: OCT 19 2001

417-001 Comment noted.

-----Original Message-----

From: Marc Smason [mailto:musicetc@earthlink.net]
Sent: Monday, October 08, 2001 1:59 PM
To: lcdriessen@bpa.gov
Subject: clear cut

417-001 |

As a seattlite, i strongly oppose bonneville power's plan to clear cut through ceadar river water shed!

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-3
Sent: Thursday, October 18, 2001 5:16 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Kangley - Echo Lake

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: <i>KELT-418</i>
RECEIPT DATE: OCT 19 2001

418-001 Comment noted.

-----Original Message-----

From: Erwin Galan [mailto:galanerwin@hotmail.com]
Sent: Monday, October 08, 2001 1:06 AM
To: lcdriessen@bpa.gov
Cc: galanerwin@hotmail.com
Subject:

418-001 |

It is of the utmost importance that the Cedar River Watershed Be completey protected against any intrusion whatsoever; educate the public regarding how we can cut our consumption. This would eliminate the need of buiding this transmission line. This IS realistic - think of how many business leave their lights and computers on AFTER hours. Look around.

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#	KELT-419
RECEIPT DATE:	OCT 19 2001

From: Driessen, Laurens C - TNP-3
Sent: Thursday, October 18, 2001 6:05 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: NO to BPA's plan to log protected watershed, Kangley - Echo Lake

-----Original Message-----

From: Judy Lightfoot [mailto:jhlightfoot@hotmail.com]
 Sent: Thursday, September 27, 2001 4:26 PM
 To: jim.compton@ci.seattle.wa.us; jan.drago@ci.seattle.wa.us;
 margaret.pageler@ci.seattle.wa.us; diana.gale@ci.seattle.wa.us;
 richard.conlin@ci.seattle.wa.us; peter.steinbrueck@ci.seattle.wa.us;
 heidi.wills@ci.seattle.wa.us
 Cc: clayton.antieau@ci.seattle.wa.us; mayors.office@ci.seattle.wa.us;
 lcdriessen@bpa.gov
 Subject: NO to BPA's plan to log protected watershed

Dear City Council members:
 Don't let BPA log the Cedar River watershed. The source of Seattle's
 drinking water should continue to be carefully protected from any
 logging at
 all, but BPA hasn't even had the foresight to develop a complete
 proposal
 that fulfills official guidelines - it hasn't prepared EIS for other
 options
 than the one it happens to prefer, and there are other problems with its

proposal that SPU has carefully specified.
 Please make sure this project does NOT go forward.
 Thank you,
 Judy Lightfoot

Judy Lightfoot, PhD
 1326 NE 62nd St
 Seattle, WA 98115
 206/522-2269
http://www.homestead.com/judy_lightfoot

419-001

Kuehn, Ginny -KC-7

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#	KELT-420
RECEIPT DATE:	OCT 19 2001

From: Driessen, Laurens C - TNP-3
Sent: Thursday, October 18, 2001 6:37 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: proposed powerline in 2 watersheds, Kangley - Echo Lake

-----Original Message-----

From: virgileh [mailto:virgileh1@home.com]
 Sent: Monday, September 17, 2001 6:54 PM
 To: lcdriessen@bpa.gov; coment@bpa.gov
 Subject: proposed powerline in 2 watersheds

I understand that Bonneville Power Administration proposes new
 transmission
 lines across the Cedar and Raging River watersheds. Via this e mail I am
 requesting that BPA

- 1 - place any new lines on existing towers (NO new roads!)
- 2 - replace any forest or wetlands that are damaged
- 3 - prepare a new EIS that contains a substantive cumulative effects
 analysis, and additional alternatives.

Please acknowledge receipt of my request.

Virgil E. Harder
 8005 Sandpoint Way N.E.
 Seattle, WA 98115

420-001

420-002

420-003

419-001 Comment noted.

420-001 Please see the response to Comment 340-003.

420-002 See response to Comment 340-002.

420-003 See response to Comment 357-003.

Kuehn, Ginny -KC-7

from: Driessen, Laurens C - TNP-TPP-3
sent: Tuesday, October 30, 2001 11:58 AM
to: Kuehn, Ginny -KC-7
cc: Lynard, Gene P - KEC-4
subject: FW: Columbia River Treaty, Kanley - Echo Lake

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-422</i> RECEIPT DATE: <p style="text-align: center;">OCT 31 2001</p>

-----Original Message-----

from: Steve Burke [mailto:nomadsteve@hotmail.com]
sent: Friday, October 26, 2001 3:35 PM
to: lcdriessen@bpa.gov
subject: Columbia River Treaty

I am concerned citizen of the Pacific Northwest and have just a few questions that you might be able to help me with. I have been following the recent developments regarding the Cedar River Watershed, the primary source of Seattle's drinking water and wonder if alternative routes for the proposed powerline have been properly researched. For instance, have environmental impact statements for other routes been proposed or completed; as the city brought to your attention the need for a water treatment plant what would be created by current route? Additionally, I would be gratefull if you could pass contact information for the BC Hydro official with whom BPA is working on the Kangley-Echo Lake Transmissio Project. Thank you for your time and help.

Steve Burke
 Political Science Student from the University of Washington
 402 N 145th
 Shoreline, WA 98133
 206.417.6500

421-001

421-001 The Cedar River Municipal Watershed HCP does not disallow logging, only commercial logging. BPA is in the business of transmitting electricity. Clearing of rights-of-way to safely construct, operate and maintain high voltage transmission lines is incidental to the delivery of electric power. Furthermore, the City's HCP is between the City of Seattle and the other signatories of the HCP, NMFS and the USFWS. BPA has concluded informal consultation with NMFS and has initiated formal consultation with the USFWS to meet the requirements of the Endangered Species Act of 1972.

BPA is proposing an insurance package to ensure protection of the CRW.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-TPP-3
Sent: Tuesday, October 30, 2001 11:58 AM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Columbia River Treaty, Kanley - Echo Lake

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: *KELT-422*
RECEIPT DATE:
OCT 31 2001

-----Original Message-----

From: Steve Burke [mailto:nomadsteve@hotmail.com]
Sent: Friday, October 26, 2001 3:35 PM
To: lcdriessen@bpa.gov
Subject: Columbia River Treaty

I am concerned citizen of the Pacific Northwest and have just a few questions that you might be able to help me with. I have been following the recent developments regarding the Cedar River Watershed, the primary source of Seattle's drinking water and wonder if alternative routes for the proposed powerline have been properly researched. For instance, have environmental impact statements for other routes been proposed or completed; has the city brought to your attention the need for a water treatment plant that would be created by current route? Additionally, I would be gratefull if you could pass contact information for the BC Hydro official with whom BPA is working on the Kangley-Echo Lake Transmissio Project. Thank you for your time and help.

Steve Burke
Political Science Student from the University of Washington
1402 N 145th
Shoreline, WA 98133
206.417.6500

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: *KELT-423*
RECEIPT DATE:
OCT 31 2001

Kangley-Echo Lake Transmission Line Project

Telephone comment by Ginny Kuehn
10/31/01

Margo T. Fetz
1901 7th Avenue West
Seattle, WA 98119
206-284-5870

423-001 | Add a line to the old towers instead of building new ones.

422-001 Please see response to Comment 382-018.

422-002 Yes. Seattle Public Utilities has stated that should BPA's project cause a violation of the water quality as a result of the Proposed Action, then BPA should be responsible to construct a water filtration plant for the City of Seattle. See also response to Comment 420-002.

422-003 You may call Phil Park (604) 293-5857 of BC Hydro.

423-001 Please see the responses to Comments 339-001 and 340-003.

422-001 |

422-002 |

422-003 |

OCT 14 2001

LOU DRIESSEN
BPA

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: KELT- 424
RECEIPT DATE: NOV 06 2001

Dear Lou,

As one of Seattle's citizens who worked hard to ensure the protection of the Cedar river watershed, I am asking you, may I implore you to reconsider the plan to site a new line through the Cedar river. Perhaps you could add an additional circuit to existing towers. We are doing our utmost to conserve electricity here in Seattle and frankly need more positive proof that a new line is absolutely mandatory.

Please exercise utmost creativity at solving this dilemma which could affect this region's drinking water for generations to come.

Thank you.

David J. Scherberg

3520 NE 92ND ST
SEATTLE, WA 98115

424-001

424-001 Please see the responses to Comments 339-001 and 340-003.

Kuehn, Ginny -KC-7

From: Driessen, Laurens C - TNP-TPP-3
Sent: Wednesday, November 14, 2001 2:16 PM
To: Kuehn, Ginny -KC-7
Cc: Lynard, Gene P - KEC-4
Subject: FW: Raging-Cedar Powerline, Kangley - Echo Lake

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-425
RECEIPT DATE: NOV 14 2001

-----Original Message-----

From: Darrel Weiss [mailto:djweiss1@mindspring.com]
Sent: Tuesday, November 13, 2001 9:49 AM
To: lcdriessen@bpa.gov
Subject: Raging-Cedar Powerline

Dear Mr. Driessen:

I am extremely concerned about the impacts threatening the Cedar River Watershed as a result of access and construction of the proposed powerline. The risks and impacts are far too great, and are unacceptable.

425-001

Just because there are few or no private landholders in the Cedar River Watershed to raise a fuss about the proposed raging-cedar powerline construction does not mean this is not extremely valuable "property."

THIS LAND IS PRECIOUS AND CONSIDERABLY MORE FRAGILE THAN PRIVATELY-OWNED PROPERTIES ALREADY "RULED OUT" AS ALTERNATIVES FOR THIS POWERLINE.

It appears the selected BPA alternative for a new powerline is based strictly on cost. Cost cannot continue to be the number one priority for such decisions or future generations will find themselves with a wasted environment that was exploited at every opportunity in the name of economic gain.

425-002

WE SHOULD BE PROUD OF THIS LAND AND DO ALL WE CAN TO PROTECT IT, RATHER THAN FIND WAYS TO CAPITALIZE ON IT. Such is the trend, and it must not continue.

If our power rates need to increase because we have exceeded our capacity, then the costs must be borne by those who demand it. We cannot continue to skirt the issue of rising costs resulting from our lifestyle choices.

It is time to do the right thing -- to make the correct choice for siting this powerline (if it is, indeed, essential). I believe you know in your heart what the "correct choice of action" is. Please reconsider your alternatives and take action that does not exploit the Cedar River Watershed.

Thank you.

Darrel Weiss
755 N 204th
Shoreline, WA 98133
206-542-0687

djweiss1@mindspring.com

425-001 Comment noted.

425-002 Please see response to Comment 382-018.

RECEIVED BY BPA PUBLIC INVOLVEMENT LOG#: <i>KELT-426</i>
RECEIPT DATE: NOV 30 2001

6057 Ann Arbor Ave. NE
 Seattle, WA 98115-7618
 November 28, 2001

Communications
 Bonneville Power Administration-KC-7
 P.O. Box 12999
 Portland, OR 97212

RE: New transmission lines to Seattle

Dear Sir/Madam:

I have recently become aware of the plan that you are developing to construct a second transmission line to the Seattle area. I am shocked to learn that you prefer a second transmission route that parallels the current transmission route. I have two major concerns with this possibility.

426-001

- The Cedar River Watershed supplies hundreds of thousands of men, women, and children in the Seattle area and the water must be safe and pure. Cutting a wide swath exposes our drinking water to the run-off of the silt and debris in this proposed area. We finally stopped logging in the area. This benefits our water supply by the action of rain and trees to keep our water safe.

426-002

- The proximity of the proposed second route so close to the current route exposes **both** routes to the very same climatic conditions that may knock out our power. It would seem logical to select an alternate route to avoid this potential devastating interruption of our power. In light of our fears of terrorist activities, it is also important to have a second route a considerable distance from the first route.

I look forward to your response to these concerns.

Sincerely,



Bonnie E. Miller

CC: Seattle City Council

426-001 BPA would guard against any sediment from reaching surface waters within the Cedar River Municipal Watershed. BPA would undertake erosion control measures to ensure against siltation of surface waters, and therefore, BPA does not anticipate that any pollutants would affect the water quality of the Cedar River Municipal Watershed.

426-002 While NERC reliability criteria does not allow both of these lines (existing Raver-Echo Lake line and the proposed Kangley-Echo Lake line) to be strung from a single set of towers, siting the transmission lines adjacent to each other is permitted. Outage of two adjacent lines is much less likely than outages of both lines on a double-circuit tower. See also Section 2.3.8 of the SDEIS and the responses to Comment 1459-009. See public meeting Comment 20 for a description of NERC)

BPA transmission lines are designed to handle high winds and ice loading, so any single weather related event would unlikely result in the loss of both lines. BPA has looked at the expected common mode outage rate of two 500-kV lines on adjacent towers in this region and has found that exposure to be acceptable.

BPA is concerned about security and takes precautions throughout the transmission system.



November 19, 2001

Gene Lynard (ITEC-4)
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon
97208

Dear Mr. Lynard:

Re: Kangley – Echo Lake Transmission Line Project

Powerex is responsible for marketing BC Hydro surplus energy, scheduling power deliveries resulting from Columbia River coordinated operation, and marketing surplus Canadian Entitlement to the Columbia River Downstream Benefits. Powerex also buys and sells electricity across western North America. In these capacities, Powerex makes extensive use of the Bonneville Power transmission system and its interconnections with Canada. In support of its trading activities, Powerex maintains involvement in Northwest and Western Interconnection regional planning activities for transmission system reinforcement. We would like to take this opportunity to comment on the need for the Kangley – Echo Lake Transmission Line Project. The following comments are based on our own experience with transmission restrictions and regional planning forums.

The Kangley – Echo Lake Transmission Line Project is one of many transmission projects needed for regional and Western Interconnection energy security. Over the past few years, power transfers between the Northwest U.S. and Canada have frequently been restricted due to inadequate transmission in the Seattle area. In extreme conditions, we understand this can threaten security of supply to the Seattle area.

Transmission owners in the Seattle Area, including BPA, Puget Sound Energy, and Seattle City Light, have undertaken many upgrades of the 230 and 115 kV transmission in the area over the past few years to relieve transmission constraints in the area and between the PNW and B.C. These owners have reported that the opportunities for further upgrades of the 230 and 115 kV to address restrictions are limited and that reinforcement of the 500 kV transmission system is needed. Information presented in public regional planning meetings on alternatives considered by the affected entities has shown the Kangley – Echo Lake line to be a key reinforcement for the area.

Planning studies have identified that the Kangley – Echo Lake Transmission Line Project is required mainly to maintain adequate transmission for supply to the Seattle/Tacoma area and relieve transmission capacity restrictions for the return of the Canadian Entitlement, as compared to importing power from Canada. The Columbia River Treaty provides for return of the Canadian Entitlement to Canada on a firm basis.

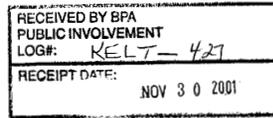
BC Hydro has invested in upgrades to maintain and enhance the transfer capability between B.C. and the PNW. Also, Powerex has participated in the costs of right of way maintenance for lines in the Seattle area to help maintain transfer capabilities.

While Powerex cannot comment on the specific routing or other aspects of the proposed line, Powerex believes that there is an urgent need to upgrade transmission capacity in the area to support Seattle area load growth and provide for return of increasing Canadian Entitlement capacity in April 2003.

Sincerely,

Phil Park, P.Eng.
Manager, Transmission Access

Direct Line: 604.891.5020
Fax Line: 604.895.7012
Email: phil.park@powerex.com



427-001 Comment noted.

427-002 Comment noted.

supply.
flexibility
commitment.

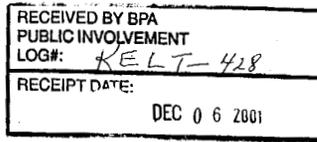
POWEREX CORP.
Suite 1400
666 Burrard Street
Vancouver, BC
Canada V6C 2X8
TEL: 604.891.5000
1.800.220.4907
www.powerex.com

427-001

427-002

November 2001

Attention Lou Driessen, Project Manager
Bonneville Power Administration - KC-7
PO Box 12999
Portland, Oregon 97212



Mr. Driessen,

428-001

I am deeply disturbed about your plans to build nine miles of new 500-kilovolt line through the Cedar and Raging River watersheds and your 1.5 miles of new road construction. Your preferred alternative states a plan to permanently clear-cut a swath from 150' to 285' wide through the forest, including Seattle's watershed, which is currently protected from logging. This plan would destroy forests recently protected by the City of Seattle and Protect Our Watershed Alliance. There are important salmon fisheries in Raging River and the City of Seattle is working to re-establish salmon in Cedar River. It was a landmark decision by Seattle to preserve its watershed forests. Would BPA propose a powerline through Mt. Rainier National Park? Then why through our protected watershed? Please thoroughly address your reasons for dismissing the other alternatives in your final EIS as your draft didn't adequately explain the reason they were thrown out.

428-002

Most of all, please realize that your plan is a temporary fix. In the next 10 years, we will be at the same load capacity that we are at now. What then? More logging in our watershed? What we need are stronger conservation programs. It is an unrealistic view that we have unlimited amounts of resources here in the Pacific Northwest. We have met a load capacity because the population has grown so significantly in the last 10 years. It's time we insist on conserving what we have and making it enough instead of simply saying we'll go find more. Especially when the only offered solution is one that could potentially contaminate the drinking water supply for over 800,000 Seattle residents who said they were willing to pay several dollars extra each year to protect our watershed.

428-003

If in the end you decide that conservation won't work and we need a new line, add additional circuits to towers in the existing corridor. I realize the potential for large scale failure, but I also realize the possibility is rare that this would happen. I INSIST that any forest or wetlands that are damaged be replaced. I also ask for a new EIS with needed information, a substantive cumulative effects analysis and additional alternatives especially including conservation.

Thank you,

Sabrina Shepherd

650 SW 316th St.
Federal way, WA 98023

428-001 Please see response to Comment 382-018.

428-002 See response to Comment 349-001.

428-003 Please see the response to Comment 340-003.

Kuehn, Ginny -KC-7

From: mlorincz [mlorincz@fhcrc.org]
Sent: Monday, December 10, 2001 4:20 PM
To: comment@bpa.gov
Subject: Kangley-Echo Lake Transmission Project

RECEIVED BY BPA PUBLIC INVOLVEMENT
LOG#: <i>KELT-429</i>
RECEIPT DATE: DEC 11 2001

Hello,

I am writing to voice my opinion on the Kangley-Echo Lake Transmission Project. Clearcutting in the Cedar River Watershed to construct a powerline highway through this beautiful natural area is not a good solution to the issue faced by the Bonneville Power Administration. The Cedar River Watershed should be preserved as is.

Matthew C. Lorincz
mlorincz@fhcrc.org

429-001

429-001 Comment noted.

Kuehn, Ginny -KC-7

From: Lynard, Gene P - KEC-4
Sent: Tuesday, December 11, 2001 2:12 PM
To: Kuehn, Ginny -KC-7
Cc: Driessen, Laurens C - TNP-TPP-3
Subject: FW: Proposed Raging-Cedar Powerline

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: *KELT-430*
RECEIPT DATE:
DEC 11 2001

Another email on the Kangley-Echo Lake EIS. Thanks.

-----Original Message-----

From: Darrel Weiss [mailto:djweiss1@mindspring.com]
Sent: Monday, December 10, 2001 8:06 PM
To: Gene Lynard (E-mail); Laurens Driessen (E-mail); Tom Pansky (E-mail); Vickie VanZandt (E-mail)
Cc: Ron Sims (E-mail); Gary Locke (E-mail); Heidi Wills (E-mail); Jan Drago (E-mail); Jim Compton (E-mail); Judy Nicastro (E-mail); Margaret Pageler (E-mail); Nick Licata (E-mail); Peter Steinbrueck (E-mail); Richard Conlin (E-mail)
Subject: Proposed Raging-Cedar Powerline

Dear Bonneville Power Official (Mr. Lynard, Mr. Driessen, Mr. Pansky, Ms. VanZandt):

You know how people are always saying "not in my backyard"? I would like to remind you that this is not the case for myself and many others who are very concerned that a new powerline is proposed to be built in the Habitat-Conservation-Plan-protected Cedar River watershed. It is not our backyard -- it the Seattle area's primary drinking water supply -- and it is a place that really should not be considered for a construction project of this magnitude.

430-001

I'm surprised that you let the not-in-my-backyard-property-owners (those whose properties fall into your category of "routes considered but eliminated") scare you off.

The watershed is not the only alternative. It is not the best alternative. It is the riskiest alternative. It is the most damaging alternative (and therefore, most certainly, the most costly alternative).

430-002

The City of Seattle's drinking water watershed should not be for sale.

I believe it was a mistake to quickly rule out alternatives outside the watershed because "hundreds of rural-residential properties" would object to a powerline in their backyard.

430-003

I am copying this message to my elected officials, urging their support in siting the powerline outside the watershed. If the project moves forward within the watershed, I urge them to assure that significant mitigation compensation be assessed the BPA. I also urge them to make sure the BPA takes every precaution to assure that the watershed is not damaged or compromised in any way.

The safeguards necessary to comply with the 50-year HCP protecting the watershed have not been adequately addressed. They need to be addressed considerable detail. The impacts also must be adequately mitigated.

Please -- do not trample on the watershed! Pursue another, less threatening route.

Darrel Weiss
755 N 204th
Shoreline, WA 98133-3112
206-542-0687

430-001 Comment noted.

430-002 Please see response to Comment 382-018.

430-003 See response to Comment 340-002.

Kuehn, Ginny -KC-7

From: Lynard, Gene P - KEC-4
Sent: Friday, January 04, 2002 4:27 PM
To: Kuehn, Ginny -KC-7
Subject: FW: KANGLEY-ECHO LAKE TRANSMISSION LINE

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-431
RECEIPT DATE: JAN 07 2002

More comments on Kangley-Echo Lake already. Thanks.

-----Original Message-----

From: Peter Rimbos [mailto:primbos@attbi.com]
Sent: Wednesday, January 02, 2002 5:51 PM
To: gplynard@bpa.gov
Subject: KANGLEY-ECHO LAKE TRANSMISSION LINE

Gene,

We understand the comment period on the draft EIS for the subject project is closed. However, as long-time residents in the Greater Maple Valley area, we wished to express our concerns with the subject project.

431-001 |
431-002 |
431-003 |
431-004 |

1. The Draft EIS fails to demonstrate a need for an additional transmission line.
2. Has the BPA done enough to increase conservation and reduce demand, especially during the peak power periods in question?
3. Has the BPA completed a detailed evaluation of other alternatives?
4. Were full mitigation costs included in BPA's analyses (e.g., a line through the watershed would be more expensive if full mitigation costs were included, such as damaged habitat)?

Please revise this project. Thank you.

Peter and Naomi Rimbos
19711 241st Ave SE
Maple Valley, WA 98038-8926
primbos@attbi.com

Kuehn, Ginny -KC-7

From: MPaul Hansen [student_uw98115@yahoo.com]
Sent: Sunday, January 13, 2002 4:10 PM
To: comments@bpa.gov
Cc: student_uw98115@yahoo.com
Subject: Comments on HV BPA transmission lines

RECEIVED BY BPA
PUBLIC INVOLVEMENT
LOG#: KELT-432
RECEIPT DATE: JAN 14 2002

1-8-02

RE: Kinsley-Kanley Line upgrade - comments

Perhaps lattice tower aesthetics can be improved.

432-001 |

So they resemble the Tokoyo Tower or Eiffel Tower. By adding dummy member with slotted end holes, to soften sharp re-entrant corners. So the body-pedestal looks like curves rather than straight lines

432-002 |

Also [this may be redundant] has consideration been given to a new cross mountain HV line over Stampede Pass but then through Cedar Notch, down the Cedar River, via the existing 115 kv line to the Fairwood Station near the large Seattle load center? Just a thought, for what it is worth.

- 431-001 Comment noted.
- 431-002 See response to Comment 349-001.
- 431-003 Additional information on the alternatives has been included in the SDEIS.
- 431-004 Please see response to Comment 382-006.

- 432-001 Comment noted.
- 432-002 If another line is needed across the Cascade Mountains, it would likely be needed north of Seattle in the Monroe area. BPA has identified that another cross-mountain 500-kV line would be necessary after about 2010, but has not done a more extensive siting evaluation.

Public Meeting

- 1 *What clearance criteria do you use over trees?*
- 2 *You should be able to figure how tall towers need to be to have adequate clearance (and) be able to keep trees in right-of-way.*
- 3 *EIS needs more detail describing where trees can be left in gorges — maybe just cutting on banks. Because in these areas, there may be adequate clearance.*

- 1 and 2 BPA typically removes all tall-growing vegetation within the ROW during the construction process. This precludes problems during the stringing process (stringing involves connecting the conductor from tower to tower and trees left in the ROW can interfere with that process) and makes returning for vegetation maintenance unnecessary for a number of years. Tall-growing species will either resprout or seed in during that first 3–5 year period and some of those species can grow 10 feet or more per year. In certain locations, where topography is such that BPA can retain tall-growing vegetation (such as over canyons or deep ravines), the minimum clearance over these trees varies depending on the voltage of the line. In this case, where a 500-kV transmission line is proposed to be built, a minimum distance of is 20 feet plus the specific vegetative species' growth factor to the line needs to be maintained to prevent flashover.
- 3 The trees within the Proposed Action area are upwards to 200 feet tall. To allow trees to remain in the ROW, the towers would need to be about 350 feet high or higher, considering sag, insulators, minimum clearance to the trees, etc. Discounting the fact that these taller towers would be much more expensive to build and maintain, there are a number of reasons why taller towers are not a good idea:
 - For reliability, towers of the new line must not be able to fall into the adjacent line. So the taller the structure, the farther it must be away from the existing line. For 350 foot towers, the new line must be about 350 feet away from the existing line. In addition to a large increase in costs, many more new access roads would need to be constructed. Some of these roads would need to go through sensitive areas.
 - This height of towers would require a much larger "foot print" — 80 to 100 foot square — to withstand the weight of the steel. A larger "foot print" would require much more land to be disturbed and cleared around the bases, which would cause higher impacts on the environment.
 - Taller towers would create a visual eyesore on the landscape since they would be approximately 150 feet above the forest canopy.
 - Any transmission tower over 200 feet in height has to go through FAA registration. The FAA may require lights on the

- 4 *BPA doesn't allow trees to grow to height within clearance limits. (Probably more economical to keep cleared.) EIS should address maintaining vegetation to clearance limit — say come in and top once a year. Weigh environmental impacts to cost. Or have taller towers to allow vegetation to grow taller.*
- 5 *I suggest you excerpt some items out of Vegetation Management EIS into this EIS, since many people don't have time to go through numerous documents.*
- 6 *Going through watershed is a special situation that calls for special measures; you can't use standard practices.*
- 7 *BPA's estimate of 1.5 miles of new access roads: Is that based on general assumptions or actual field review?*
- 8 *Are there conditions that you would use helicopters to install towers rather than driving to sites?*

towers. If lights are required, a separate powerline of lesser voltage would have to be built to power those lights.

Leaving trees in the ROW can cause problems with stringing the conductor. During stringing, the conductor is connected from tower to tower. Trees interfere with this process and have caused bodily harm to workers.

- 4 BPA is responsible for providing low-cost electricity to the Pacific Northwest. To keep those costs low, BPA needs to find the most economically efficient and environmentally acceptable method to keep its transmission lines safe and reliable. To allow trees to grow in the ROW and continually top them would be very costly and would involve bringing in equipment to do that job since climbing smaller trees is not safe. Bringing in this specialized equipment would not only cause a safety hazard (especially if trees are maintained near the minimum clearance requirements), but would probably require additional roads to get the equipment to the trees. Bringing in additional equipment also increases the risk of accidental fuel/oil spills and the introduction of noxious weeds. Controlling vegetation in its earliest stages is the most economically efficient and environmentally acceptable way to maintain the safe and reliable operation of our transmission lines.
- 5 Please see Appendix K in the SDEIS for a summary of BPA's Vegetation Management EIS.
- 6 BPA is aware of the unique protection that the Cedar River Watershed requires and agrees with your comment. For example, during surveying of the preferred alternative, special surveying techniques were used to avoid cutting any trees over 2 inches in diameter. If BPA decides to build a transmission line, special care will be taken to protect this resource.
- 7 The road estimate was made prior to a field review using aerial photomaps and a general working knowledge of the local terrain. An updated estimate based on a field review is included in the SDEIS.
- 8 Helicopters have been used in situations where access conditions make it difficult to drive large equipment, such as

- 9 *Purpose of the project is not substantiated in the Draft EIS.*
- 10 *There are no studies (power-flow) in the document to substantiate the need statement.*
- 11 *Can we provide the power-flow studies for review? WSCC cases.*
- 12 *Why isn't there a public meeting being held in Seattle?*
- 13 *The project hardly affects the people of Maple Valley and affects the people of Seattle much more.*
- 14 *Do we send power out of the state?*
- 15 *Agree with preferred alternative since it is the least disruption to the watershed itself. The routes avoiding the watershed are twice as long and have greater impact to residences. (Ravensdale)*
- 16 *Why doesn't the DEIS address the actual clearing anticipated? It is much too general.*

cranes, to tower sites. However, helicopter construction does not totally eliminate the need for vehicle access to each tower site because foundations still need to be installed. BPA will require the construction contractor to use helicopter construction techniques if BPA decides to build the line.

- 9 Additional information has been added to the SDEIS to address this comment. Please see Chapter 1.
- 10 Please request a copy of SDEIS Appendix H, Summary of Transmission Planning Studies for more information.
- 11 See response to Comment 10.
- 12 BPA did hold public meetings in Seattle to get scoping comments for the SDEIS and to gather comments after release of the SDEIS.
- 13 Comment noted.
- 14 Yes, BPA does send power out of the state. BPA also imports power from other states and British Columbia when power is needed in the Pacific Northwest.
- 15 Comment noted.
- 16 Please see response to Comment 394-034.

- 17 *Why do you need a new corridor? Why can't you use existing towers?*
- 18 *If the existing Kangley-Echo Lake line were taken down to rebuild a new double-circuit line, how long would it be out of service? (Answer: 6-8 months.)*
- 19 *Why can't you build the new line immediately adjacent to the existing line so you don't have to clear a whole new right-of-way?*
- 20 *NERC: Is this an advisory or regulatory group?*
- 21 *Is BPA buying replacement land for the wetlands it is impacting?*

- 17 A new corridor is needed because the line on the existing corridor (Raver-Echo Lake No. 1 500-kV line) cannot be removed from service for the length of time (approximately 7 or 8 months) it would take to rebuild it to a double-circuit line. The system without the existing line (Raver-Echo Lake No. 1 500-kV line) will not be able to serve expected load, the return of the US-Canada Treaty power and withstand another line outage (required to meet national reliability criteria) without a high probability of uncontrolled loss of load or a system collapse in the Puget Sound Area. Also, rebuilding the existing line to a double-circuit line essentially provides no additional capacity to serve the Puget Sound load. This is because BPA must plan for an outage of the double-circuit line as required by the North American Electric Reliability Council (NERC). This in essence will not allow BPA to make use of the new line on the double-circuit towers, therefore making the investment worthless.
- 18 Seven to 8 months. Due to NERC rules, BPA cannot build this project on double-circuit towers.
- 19 BPA must maintain a safe electrical clearance between adjacent lines and to the edge of the right-of-way. The new line cannot be built on the existing right-of-way and maintain both a safe electrical distance to the existing line and edge of right-of-way. BPA also wants to make sure one tower cannot fall into the adjacent line.
- 20 NERC, or the North American Electric Reliability Council, was established in 1968 to promote bulk electric system reliability and security. Among other responsibilities, it establishes operating and planning standards to ensure electric system reliability. NERC is composed of ten Regional Councils including the Western Electricity Coordination Council (WECC). WECC members include 97 electric utilities, 17 affiliate members, and nine State Commission representatives. (See www.wecc.biz and www.nerc.com.) BPA and other utilities follow NERC and WECC criteria to ensure reliable electric service. The Reliability Council operates under a system of voluntary compliance. In addition, BPA and most members of WECC have agreed to mandatory compliance with certain criteria and standards.
- 21 BPA is studying impacts to wetlands and natural habitat for endangered species within the Cedar River Watershed. The Preferred Alternative (Alternative 1) minimizes additional rights-

- 22 *Reducing or minimizing impacts is not adequate mitigation.*
- 23 *DEIS ignores cumulative effects of building the line through the forest and watershed.*
- 24 *You need to replace right-of-way acreage taken out of forest production. Low elevation forests are disappearing. Just because you haven't replaced acreage in the past, that's not a good enough reason not to start now.*
- 25 *Will we see, in the near future, retrofitting old double-circuits to single-circuit with greater separation between lines? That would be a huge impact.*
- 26 *As reliability standards change over time, so do mitigation requirements (replace areas permanently lost).*
- 27 *If you remove 150 acres of mature forest, you should replace with same, or multiplier of 150 acres for immature forestland.*

of-way needed by paralleling the existing Raver-Echo Lake line. This alternative also uses existing access roads where possible. New towers and access roads have been located out of wetlands. Some wetlands would be converted from a timbered wetland to scrub-shrub wetlands.

BPA would also cut only those trees outside the right-of-way that are unhealthy, are leaning towards the line or are very likely to fall into the new line. This is a drastic reduction from normal practice of cutting any tree that could potentially fall into the new line. BPA would be willing to reduce reliability of the new line to cut as few trees as possible within the Watershed. In addition, trees next to the Cedar River would not be cut or if they are too tall, only topped.

In addition, BPA has purchased land for potential replacement habitat forest and wetlands. See response to Comment 340-002.

- 22 Mitigation measures cited do prevent, reverse, and rectify impacts during or from construction. There are impacts that are not reversible such as permanent loss of timber and access road construction. BPA is studying the possibility of replacement as an additional mitigation measure. Please see response to Comment 340-002.
- 23 Please see response to Comment 394-090.
- 24 See responses to comments 21 and 22.
- 25 BPA has no program to rebuild/replace existing double-circuit 500-kV towers to two single-circuit towers for reliability purposes to meet new reliability guidelines. Nevertheless, under NERC reliability guidelines, BPA is required to plan for outage of a double-circuit tower, whether that facility is new or existing. If the guidelines cannot be met, then some action is required, which could include reconfiguration, remedial action schemes or building additional lines.

When there is a need for new projects, some will be double circuit and some will be single circuit lines. When BPA sites these lines there may be a need for separation from other lines. BPA has a long history of replacing old single and double-circuit low capacity lines with very high capacity single or double-circuit 500-kV lines and thereby minimizing the environmental impact. BPA has installed two of these high

- 28 *There are some of us who want to pay for quality and full mitigation.*
- 29 *You have eliminated alternatives outside of watershed, without providing a full analysis in the DEIS, thereby limiting your alternatives. The DEIS doesn't provide the relative impact of the off-watershed routes, it just simply states that a number of people didn't want this (Ravensdale) route.*
- 30 *Why were the alternatives for Rocky Reach-Maple Valley (rebuilt double-circuit, or new parallel line) dismissed?*
- 31 *What about the option of building new generation facilities?*

capacity lines across the Cascades in the last 20 years by removing old, smaller lines.

- 26 See responses to Comments 21 and 22.
- 27 See responses to Comments 21 and 22.
- 28 Comment noted.
- 29 Please see response to Comment 382-018.
- 30 These two alternatives are fully analyzed in the SDEIS.
- 31 New generation facilities are presently being proposed and constructed all across the Northwest. However, due to the deregulation of the power industry, which allows non-utilities to construct power plants, BPA has no control over where or when these plants are built. This makes transmission planning extremely difficult because a transmission line cannot be built as fast as a generation plant and the transmission system can only be planned about 4 or 5 years into the future. Completed generation plants are incorporated in the planning studies.

- 32 *Shouldn't the system be evaluated on efficiency rather than economics in regard to delivering power?*
- 33 *What about Echo Lake to Monroe? Do you have the same situation as for this project? (This is another example of cumulative affects.)*
- 34 *What was the purpose of alternatives 5a, 4b and 2?*

- 32 The transmission system must be planned on a least cost basis, which incorporates efficiency. Transmission design is a very careful tradeoff between cost, needs and capacity.
- 33 The purpose and need for the Monroe-Echo Lake 500-kV line would be to ensure reliable service to Puget Sound Area loads and to integrate potential new generation projects. Need depends in part on the decision of generation developers. BPA is examining alternatives, including approaches that do not require transmission construction. A decision on the need has not been made.
- 34 No Alternative 5a was considered.

The purpose of Alternative 2 is to avoid taking two residences located next to the south end of the Proposed Action. The purpose of Alternative 3 was to meet the WECC's reliability criteria, which recommended a minimum of 2000 feet separation between transmission line rights-of-way with at least one common terminal. Separation provides increased system reliability.

Alternatives 4A and 4B avoided the two residences located next to the southern portion of Alternative 1, the Proposed Action, and also avoided a separate crossing of the Cedar River. Both of these alternatives provided for crossing the Cedar River immediately adjacent to where BPA's existing line crosses the Cedar River. Additional alternatives were added in the SDEIS.

- 35 *You cross both Cedar and Raging rivers, plus several tributaries. (Raging river has salmon, Cedar River will have salmon.) You need to look to see how tall towers need to be to keep full riparian habitat intact along river crossings. EIS only lists 135-ft. tall towers.*
- 36 *What is minimum clearance for the 500-kV line?*
- 37 *I'm assuming the route alternatives are not going to change (east or west) of routes identified.*
- 38 *How am I going to be treated by BPA since your new line will take out my house and barn?*

- 35 Please see response to Comment 382-038.
- 36 The minimum ground clearance for a BPA 500-kV line is 35 feet.
- 37 Please see response to Comment 382-018.
- 38 As stated in the Federal Highway Administration's Brochure, "Your Rights and Benefits as a Displaced Person, Under the Federal Relocation Assistance Program," government programs designed to benefit the public as a whole often result in acquisition of private property, and sometimes in the displacement of people from their residences, businesses or farms. As a means of providing uniform and equitable treatment for those persons displaced, your government passed the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970," and the "Uniform Relocation Act Amendments of 1987."

Any individual, family, business or farm displaced by a federal or federally-assisted program shall be offered relocation assistance services for the purpose of locating a suitable replacement property. Relocation services are provided by qualified personnel employed by the Agency. It is their goal and desire to be of service to you, and assist in any way possible to help you successfully relocate.

You may review the Federal Highway Administration's Web site "Your Rights and Benefits as a Displaced Person," at www.fhwa.dot.gov/realestate/rights/index.html.

- 39 *Will the appraiser be looking at damages outside the right-of-way?*
- 40 *When you put in the new line, you will devalue my house located on the west side of the line.*
- 41 *Who will decide the final alternative?*
- 42 *Can we use superconducting conductors?*
- 43 *Are there any plans for future expansion east or west of the project area?*
- 44 *Where BPA removed lines (230-kV) on the Columbia-Covington right-of-way, would BPA ever build new lines in this right-of-way? When?*
- 45 *Could BPA's public involvement office publish in newspaper a yearly statement that BPA's rights-of-way are not public rights-of-way?*

- 39 BPA usually only purchases the land rights that it needs. If BPA intends to acquire only a portion of the property, the Agency must state the amount to be paid for the part to be acquired. In addition, an amount will be stated separately for damages, if any, to the portion of the property you will keep. If the Agency determines that the remainder property will have little or no value or use to you, the Agency will consider this remainder to be an uneconomic remnant and will offer to purchase it. You will have the option of accepting the offer for purchase of the uneconomic remnant or of keeping the property.
- 40 See SDEIS Section 4.11.2.5, Community Values and Concerns, Property Value Impact.
- 41 Following the completion of the environmental review, the BPA Administrator will make a decision on the proposed project. The Administrator will choose the Proposed Action or one of the alternatives. BPA is expected to make a decision on the project 30 days after the release of this Final EIS.
- 42 No, the use of superconducting conductors is technologically infeasible at this time.
- 43 No, there are no plans to expand east or west of the project area.
- 44 This right-of-way is very valuable to BPA for future use. This statement is simply made because new rights-of-way are so difficult to acquire given the expansion of population and human activities outside of major urban areas. BPA does not have a date for this use.
- 45 Unfortunately, publishing ads or legal notices in all the newspapers of the Northwest would be expensive and whether the people who trespass on private property would read the notices and follow their direction is questionable. Illegal use of property is a continuing concern for BPA and property owners. Our maintenance staff would be happy to discuss your particular concern at your convenience.

- 46 *At one time BPA put in a gate for us, but vandals cut it down repeatedly — costing BPA too much money to maintain the gate at this location.*
- 47 *Are you bringing in lines from the east, or just tapping the new line into the existing lines?*
- 48 *Where are the new towers going to be placed in relation to the existing towers?*
- 49 *The Ravensdale alternative would have affected “many more owners,” but it is unfortunate that it has to affect other private individuals.*
- 50 *The preferred route has much less impact to residential properties than the Ravensdale route would have, although it is too bad that two houses and a barn are impacted.*
- 51 *It makes sense that the preferred route has less impact to timber, and requires fewer roads. Also this route would probably have less chance of having to condemn to acquire properties.*
- 52 *What about 30 years from now? Will a project like this come up again?*
- 53 *Where are the power sources that serve the power to this area?*

- 46 Yes, there have been gates that BPA has stopped maintaining due to the high cost of maintenance. However, we work very hard with landowners to maintain the gates. Currently we are installing stronger gates in these areas to try and keep vandals out.
- 47 The new line would be connected to an existing line.
- 48 In most cases the new towers will not be placed directly opposite of the existing towers but will be offset ahead or back-on-line. The distance of offset varies, but it would be about 50 feet.
- 49 Comment noted.
- 50 Comment noted.
- 51 Comment noted with respect to your first point. Paralleling an existing transmission line in a wooded area does minimize the clearing that would be required because no danger trees would exist, and therefore have to be removed, on the west side of the right-of-way, since there is an existing transmission located there. Additionally, BPA would take advantage of the existing access/spur road system (to the maximum extent possible) so as to minimize the number of new roads that would be needed to serve the new line.
- With respect to the second point, it is typically true that the fewer number of property owners, the less chance that any property would need to be condemned to site the line.
- 52 The need for additional projects in the future would depend on load growth.
- 53 This is not a question that can be answered with any certainty. The entire Western US electric system is interconnected. It is possible that if you are a Seattle City Light customer for example, the power Seattle City Light is buying could be coming from a power generator in El Paso, Texas or from the Centralia Coal Generating plant or any one of 1,000 other generators throughout the west. Only if the Puget Sound area were isolated from the rest of the system would it be apparent that generators in the area are serving the load.

- 54 *How does BPA use growth-rate study information collected by boring trees?*
- 55 *The DEIS is unclear about how much area is actually being cleared of trees, 150 ft. vs. up to 400 ft.*
- 56 *Vegetation will rapidly invade areas cleared of timber. How will BPA manage the right-of- way?*
- 57 *What information do you have on wildlife kills related to transmission lines (raptors)?*
- 58 *Does BPA keep records of bird kill found along right-of-way?*
- 59 *Since groundwire can have a detrimental impact on migratory birds, can you do without ground wire on this project? (Note: overhead ground wire can be marked.)*
- 60 *I recognize the need for power, but the preferred alternative is much less traumatic than an alternative like the Ravensdale route.*
- 61 *Any way to underground the line?*
- 62 *This project affects the folks in Seattle more than it does those in Maple Valley, so why are you holding the meeting in Maple Valley instead of Seattle?*

- 54 The information gathered from boring the trees gives us an idea of the age and the growth rate of the trees and an indication of site potential. When a new ROW is cleared, trees that previously grew within the protection of a group of trees (with relatively little exposure to wind) are now exposed making them vulnerable to wind throw. This vulnerability persists for about 3 to 5 years after clearing until the trees become used to their new environment and become more "wind firm." Because of this, BPA uses the growth information to add in a margin of safety of about 5 years to the calculations of safe heights.
- 55 See response to Comment 16.
- 56 BPA has prepared a programmatic EIS for its vegetation management program associated with transmission lines, roads, and related facilities. The EIS identifies appropriate measures to protect the environment while minimizing danger tree risks and maintaining the ROW within safe, reliable conditions. These guidelines provide for protecting water resources by using herbicide buffer zones. BPA would comply with the standards and guidelines established in this EIS and the Record of Decision for vegetation management (BPA 2000). See SDEIS Appendix K for more information.
- 57 BPA does not have any information about wildlife kills related to transmission lines. None have been found on the existing ROW.
- 58 BPA does not keep records of birds killed along the ROW.
- 59 We cannot do without overhead groundwire on this line. In the past, where a migratory bird path has been identified, BPA has installed bird flight diverters.
- 60 Comment noted.
- 61 Undergrounding the line was considered but eliminated because of cost. See Section 2.3.1.
- 62 We held the meeting at the Maple Valley Community Center in Maple Valley since that facility was the closest suitable meeting place to the proposed project. Meetings were held in Seattle for scoping of the SDEIS and to receive comments on the SDEIS.

Chapter 2 Response to Comment Topics	
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access roads	411-017, 394-022, 394-026, 394-037, 394-038, 394-039, 394-044, 394-047, 394-084, 394-104, 394-135, 394-173, 394-180, 394-187, 394-189, 394-204, 394-218, 394-268, 394-269, 394-270, 394-276, 394-294, 394-304, 395-002, 395-006, 405-001, 405-006, 405-017, 340-002, 342-001, 349-003, 377-001, 378-001, 378-009, 382-009, 382-014, 382-027, 382-039, 397-001, 400-004, PM #3, PM #4, PM #7, PM #21, PM #22, PM #51
anadromous fish sockeye, coho, chinook fisheries	411-008, 411-009, 394-010, 394-022, 394-027, 394-055, 394-056, 394-058, 394-059, 394-061, 394-062, 394-077, 394-078, 394-084, 394-088, 394-089, 394-132, 394-143, 394-144, 394-149, 394-153, 394-154, 394-164, 394-165, 394-166, 394-169 thru 171, 394-173, 394-178, 394-184, 394-194, 394-199, 394-200, 394-201, 394-204, 394-210, 394-307, 395-010, 382-014, 382-024, 400-001
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Cedar River municipal watershed CRW watershed	411-002, 411-016, 394-018, 394-026, 394-041, 394-047, 394-050, 394-052, 394-053, 394-075, 394-084, 394-127, 394-196, 394-197, 394-205, 395-015, 395-029, 405-009, 405-012, 340-002, 346-003, 354-002, 357-004, 360-003, 368-003, 378-001, 378-003, 382-009, 382-015, 382-017, 382-023, 382-033, 382-037, 382-039, 400-001, 400-004, 412-001, 421-001, 426-001, PM #6, PM #21
Coastal Zone Management Act	394-008, 395-045, 382-031, 400-001
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Columbia-Covington line	PM #44
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	Note: PM = public meeting comment #

Chapter 3 — Comments and Responses-SDEIS

In this Chapter comments from:

- Federal Agencies
- State Agencies
- Local Agencies
- Tribes
- Groups and Individuals
- Public Meetings

BPA completed a supplemental draft environmental impact statement (SDEIS) for the proposed Kangley-Echo Lake Transmission Line Project. The SDEIS was released to the public for a 45-day review and comment period that ended on March 1, 2003. Five public meetings were held at various locations in King County during the week of February 3-6 to gather public comments on the SDEIS.

This chapter contains the written comments from letters, e-mails, and comment sheets received during the comment period for the SDEIS and BPA's responses to those comments. It also contains the comments from the public meetings and telephone calls received during the comment period. Chapter 2 contains the written and oral comments received during the comment period for the DEIS and BPA's responses to those comments.

Letters and comment sheets were given numbers in the order they were received. Separate issues in each letter were given separate codes. For example, letter 394 might have issues 394-001, 394-002, and 394-003 identified within its text. Comments from the public meeting were also numbered. BPA prepared responses to each of these individual comments.

The chapter is organized in the following sequence: comments from ***federal agencies*** are followed by comments from ***state agencies*** (page 3-7), ***local agencies*** (page 3-11), ***tribes*** (page 3-31), then ***groups and individuals*** (page 3-43). Comments from the ***public meetings*** are at the end of the chapter (page 3-163). Because we have organized comments this way and often reference responses to other comments, please use the numerical list on the back of this page for reference. See also the reference page in Chapter 2. A listing of related comments by issue is at the end of the chapter on page 3-343.