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."

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."

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..."

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

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

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

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."

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."

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

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

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."

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

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

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

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

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.*

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

- *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.*

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."

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."

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."*

Wetlands 1-1 and 1-2 are also in Rock Creek headwaters and impacts to these wetlands would need to be compensatorally 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

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."

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

As King County requires of other public utilities, such as Puget Sound Enery, BPA should commit to compensatorally 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."

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."

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.