UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
ECOSYSTEMS,
TRIBAL AND PUBLIC
AFFAIRS

March 25, 2013

Nancy Wittpenn
I-5 Corridor Reinforcement Project
Bonneville Power Administration
P.O. Box 9250
Portland, Oregon 97207

Re: EPA Region 10 Comments on the I-5 Corridor Reinforcement Project Draft Environmental Impact Statement (EPA Project Number: 09-059-BPA).

Dear Ms. Wittpenn:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act, the US Environmental Protection Agency has reviewed the Bonneville Power Administration Draft Environmental Impact Statement for the proposed I-5 Corridor Reinforcement.

The DEIS analyzes the potential environmental impacts associated with building a 500-kilovolt lattice-steel-tower transmission line that would run from a new 500-kV substation near Castle Rock, Washington, to a new 500-kV substation near Troutdale, Oregon. The DEIS considers four alternative transmission line routes (West, Central, East and Crossover, each with optional route variations); three sites for the proposed substation near Castle Rock, and one site for the proposed substation near Troutdale. The Central Alternative – Option1 has been identified as the Preferred Alternative.

The EPA appreciates the effort taken on the part of BPA to develop a robust range of alternatives. We also appreciate the inclusion of a non-wires option in the analysis process, and the extensive public involvement undertaken in support of the DEIS. Overall we find the EIS to be well structured. The inclusion of criteria for defining impact levels for each analyzed resource is useful, and helps to ensure a consistent analytical approach across alternatives.

Our analysis of the DEIS has also identified information gaps that we believe need to be addressed in the FEIS. Specifically, additional baseline information related to impacts from the existing energy corridor is needed for the West Alternative. Without this baseline information, it is difficult to effectively evaluate the significance of impacts. In addition, our comments discuss the identification of the environmentally preferred alternative. Based on the analysis in the DEIS, we believe the West Alternative would best promote the national environmental policy as expressed in NEPA's Section 101. Finally, we offer potential mitigation measures and BMPs for inclusion in the Final EIS, and recommend that the Final EIS more effectively coordinate the NEPA process and the Clean Water Act Section 404 permitting process by including information that demonstrates compliance with the Clean Water Act Section 404(b)(1) Guidelines. Please see the enclosed comments for specific detail.

Due to the information gaps identified, we have rated the DEIS EC-2 (Environmental Concerns – Insufficient Information). An explanation of this rating is enclosed for your reference.

We appreciate the opportunity to review this DEIS. If you have question about our comments, please contact me at (206) 553-1601 or by electronic mail at reichgott.christine@epa.gov, or you may contact Teresa Kubo of my staff at (503) 326-2859 or electronic mail at kubo.teresa@epa.gov.

Sincerely,

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

EPA Region 10 Comments
I-5 Corridor Reinforcement Project
Draft Environmental Impact Statement

Affected Environment
Describing impacts of an action requires an understanding of the current conditions of affected resources (baseline conditions). For the Central, East and Crossover Alternatives, we find the level of baseline information to be adequate. Baseline information for the West alternative, however, is lacking. Because the West alternative follows the existing right of way, information is needed about how the existing right of way currently affects resources, ecosystems, and human communities. Impacts from the existing ROW are alluded to in the cumulative effects chapter of the DEIS (Chapter 26), but we believe a broader and more quantitative discussion of existing effects should be incorporated into the document.

As an example, Table 5-1 considers the numbers of homes from the edge of the right-of-way, and notes that under the West Alternative, 3,032 residences would be within 500 feet of the ROW. It would be instructive to know to what extent this represent an increase from existing impacts (i.e. how many residences are currently within 500 feet of the ROW?) Similarly, it is not clear from reading Chapters 16 and 18 (Wetlands and Wildlife, respectively) the extent to which the existing ROW is affecting wetland structure and function, and wildlife habitat and connectivity.

We recommend that the DEIS include an assessment of impacts from the existing I-5 power corridor in the baseline assessment for the West Alternative, with particular focus on impacts to homeowners, wetlands, and wildlife habitat.

Environmentally Preferable Alternative
40 CFR 1505.2(b) requires that the Record of Decision identify all alternatives that were considered, ". . . specifying the alternative or alternatives which were considered to be environmentally preferable." The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.

The identification of the environmentally preferable alternative may involve difficult judgments, particularly when one environmental value must be balanced against another. The EPA's guidance directs us to assist the lead agency in developing and determining the environmentally preferable alternative through our comments on the Draft EIS.

Based on the analysis of alternatives presented in the DEIS, we cannot conclude that the preferred alternative (Central with Option 1) is the environmentally preferable alternative. This conclusion is based on the following factors:

<u>Impacts to Wetlands</u>. The DEIS indicates that the West alternative potentially affects a greater acreage of wetland than does the Central alternative (31 additional acres of clearing and 18 additional acres of fill[1]). However (as noted above) because it is not clear to what extent wetland function is already altered within the West corridor, we cannot determine whether the West alternative represents a greater impact

[1] DEIS Table 16-1

to wetland resources than the Central Alternative. The Central Alternative would require entirely new Right of Way through previously unimpacted wetlands that may be functioning at a higher level than those within the West corridor. Without site specific surveys we are reticent to conclude that the Central Alternative represents a lower impact to wetlands. We recommend that the FEIS include information regarding site-specific wetland types and functions. This information will be necessary to compare the environmental impacts of the various alternatives and identify the Least Environmentally Damaging Preferred Alternative pursuant to the CWA Section 404(b)(1) Guidelines. Additional recommendations related to wetlands are included below under the heading "CWA Section 404(b)(1) Guidelines."

Roads. The Central Alternative would require the construction or improvement of 159 miles of road, whereas the West Alternative would require the construction or improvement of 64 miles of new road (the fewest miles of any of the alternatives)[2]. Roads are of key concern to the EPA because roads contribute more sediment to streams than any other management activity and interrupt the subsurface flow of water, particularly where roads cut into steep slopes. In addition, roads and their use contribute to habitat fragmentation, wildlife disturbance, and the introduction or exacerbation of noxious weeds. Because of these factors, the EPA in general favors alternatives that minimize road construction.

Unstable Terrain. Most of the Central Alternative is within potentially landslide-susceptible terrain and would cross several mapped landslides. Overall, the Central Alternative would disturb about 596 acres of soil with severe erosion hazard, the second-highest among the action alternatives. The West Alternative would disturb about 211 acres of soil with severe erosion potential, the least of the action alternatives[3]. While we recognize towers and roads would be built to appropriate design standards, we believe that unstable landforms should be factored into the consideration of the environmentally preferable alternative.

Waterbody Crossings. Under the West Alternative, riparian vegetation would be cleared at 47 forested crossings of fish-bearing streams, the least among the action alternatives. Of those crossings, nineteen would occur where existing shade provides effective stream cooling. Under the Central Alternative, riparian vegetation would be cleared at 68 forested crossings of fish-bearing streams, the greatest among the action alternatives. Of those crossings, 49 would occur where existing shade provides effective stream cooling[4]. At the watershed scale, these impacts may be low, but because of the potential for localized impact, we believe that loss of shade/potential for large wood recruitment should be factored into the consideration of the environmentally preferable alternative.

We recognize that the preferred alternative is a different concept from the idea of the environmentally preferred alternative. We also recognize that identification of the environmentally preferable alternative is subjective and requires a certain amount of judgment on the part of the federal agency decision maker. In practice, one alternative may be preferable for some environmental resources while another alternative may be preferable for other resources. Based on our review of the existing information, we believe the West Alternative is the alternative that best promotes NEPA's goals. If the BPA proceeds with selection of the Central Alternative, the FEIS should lay out a clear rationale for its selection, and why it best fulfills the purpose and need of the proposed action in light of noted environmental concerns.

[2] DEIS Table 12-1
[3] DEIS page S-44
[4] DEIS page S-50

Wetland Mitigation
We note that, according to page 3-2 of the DEIS, double circuit towers use less right-of-way. Although tower configurations are presented in Appendix B, it is difficult to determine whether the DEIS considered installing double circuit towers through wetland areas in an effort to reduce the number of acres impacted. We recommend that the FEIS provide additional information about the types of towers proposed for installation within wetland areas, and a discussion of the potential for double circuit towers to further reduce impacts to wetland areas.

Mitigation Measures Included as Part of the Project
We appreciate the inclusion of Table 3-2 (Mitigation Measures Included as Part of the Project). We have reviewed the measures included in the table and offer the following comments and recommended additions:

Under "Geology and Soils" we support the inclusion of BMPs listed (including the Manual for Western Washington). Given the amount of new road construction and road improvement proposed, we also recommend including the following BMPs:

- Use suitable surface drainage and roadway stabilization measures to disconnect the road from the waterbody to avoid or minimize water and sediment from being channeled into surface waters and to dissipate concentrated flows.
- Inspect drainage structures and road surfaces after major storm events and perform any necessary maintenance.
- Repair and temporarily stabilize road failures actively producing and transporting sediment as soon as practicable and safe to do so.
- Restrict use if road damage such as unacceptable surface displacement or rutting is occurring.

We also We appreciate that on page 3-15 the DEIS stipulates that where new roads cross year-round, seasonal, or fish-bearing streams, open bottomed culverts or bridges would be needed. We recommend that this measure be incorporated into Table 3-2. We further recommend that this measure be expanded upon to include the following:

- Design the crossing to pass a normal range of flows for the site.
- Install stream crossings to sustain bankfull dimensions of width, depth, and slope and maintain streambed and bank resiliency and continuity through the structure.
- Design Bridge or culvert to prevent restriction of flood flows.
- Use site conditions and local requirements to determine design flood flows.
- Use suitable measures to protect fill from erosion and to avoid or minimize failure of the crossing at flood flows.

Under "Public Health and Safety" and/or "Soils and Geology" we recommend adding BMPs related to blasting:

- Develop and follow blasting plans when necessary.
- Use restrictive blasting techniques in sensitive areas and in sites that have high landslide potential.
- Avoid blasting when soils are saturated.

Sundial Substation
All of the action alternatives propose to utilize part of the Reynolds Metals Superfund site for the Sundial Substation. In addition, lines and access roads would cross a portion of the site. On page 10-13 the DEIS concludes that there would be low impact where the alternatives cross the Reynolds Metals Superfund Site. The DEIS also notes that BPA would notify the EPA and DEQ and prior to construction, and that "plans would be in place to address and mitigate any known or potential areas of contamination that may be encountered."

The EPA agrees that it will be critical for BPA to coordinate with DEQ and the EPA prior to construction of the Sundial Substation. Based on our previous investigations and site history, we would not expect to find any significant contamination in the area shown for the proposed substation. Tower footings, however, will require additional consideration. We recommend that the FEIS reaffirm the BPA's intention to work with DEQ and the EPA on identifying any potential areas of contamination and mitigation actions for the Reynolds Metals Superfund site as locations for project facilities are finalized.

We also note that habitat restoration has been completed on a 21 acre site adjacent to Company Lake (a portion of the "Outside the Dike" area in Figure 10-2). This action was part of a Natural Resource Damage Settlement. A permanent conservation easement for the Company Lake parcel is now in place. We recommend that FEIS acknowledge this habitat restoration site, and clarify that the proposed project will not impact the easement area.

Aquatic Resources, Wetlands and Riparian Areas
Section 16.2.8 of the DEIS notes need to obtain all required permits with approved wetland delineations and compensatory mitigation plans prior to construction. We recommend that the FEIS discuss this permitting requirement more specifically.

The proposed activities will require a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers. The Clean Water Act Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material require that impacts to aquatic resources be avoided, minimized, and compensated for in that sequence.[5]

To more effectively coordinate the NEPA process and the Clean Water Act Section 404 permitting process, we recommend that the FEIS include information that demonstrates compliance with the Guidelines.

For unavoidable impacts, compensatory mitigation should be consistent with the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule.[6] We recommend that the FEIS include a discussion of all mitigation options, including on-site mitigation. For unavoidable losses to aquatic resources, compensatory mitigation should be implemented in advance of the impacts to avoid temporal habitat losses.

The FEIS should include an aquatic resources/wetlands mitigation plan, developed consistent with the requirements outlined at 40 CFR 230 Subpart J. To the extent possible, the following information from the draft mitigation plan should be included in the FEIS:

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[5] 40 CFR 230.91(c)(2) and (c)(3)
[6] 33 CFR 325 and 332, and 40 CFR 230

- A description of the resource type and amount that will be provided, the method of compensation, and the manner in which the resource functions of the compensatory mitigation project will address the needs of the ecoregion, physiographic province, or other geographic area of interest.[7]
- A description of the factors considered during the compensatory mitigation project site selection process.[8]
- A description of ecological performance standards that will be used to assess whether the project is achieving its objectives.[9]
- A description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed.[10]
- Descriptions of the long-term management plan, adaptive management plan, and financial assurances.[11]

[7] 40 CFR 230.94 (c)(2)
[8] 40 CFR 230.94 (c)(3)
[9] 40 CFR 230.95
[10] 40 CFR 230.94 (c)(10)
[11] 40 CFR 230.94 (c)(11-13)

U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.