SUPPLEMENTAL COMMENT REPORT

I-5 Corridor Reinforcement Project

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INTRODUCTION

HOW TO USE THE REPORT

The Bonneville Power Administration (BPA) is a federal agency under the U.S. Department of Energy (DOE) that serves the Pacific Northwest through operating an extensive electric transmission system and marketing wholesale electrical power. The purpose of this report is to supplement both the Scoping Report released in January 2010 and the Supplemental Comment Report released in April 2011 for the I-5 Corridor Reinforcement Project. This supplemental comment report identifies and summarizes new issues and information not included in the prior two comment reports. It does not list all the comments received, but distills the comments into key themes. Although the purpose of this report is to present new or different ideas, some duplication from the January 2010 Scoping Report and the April 2011 Supplemental Comment Report may occur when necessary to provide context.

This report captures comments received following the release of centerline, tower and access road location information on November 18, 2010 and includes comments through December 31, 2011. Although the official public scoping comment period deadline has passed, BPA continues to analyze the comments it receives to determine issues of concern to stakeholders that will help shape the scope of the environmental analysis and the alternatives considered in the draft environmental impact statement (EIS). Additional supplemental comment reports may be prepared for specific time periods as necessary.

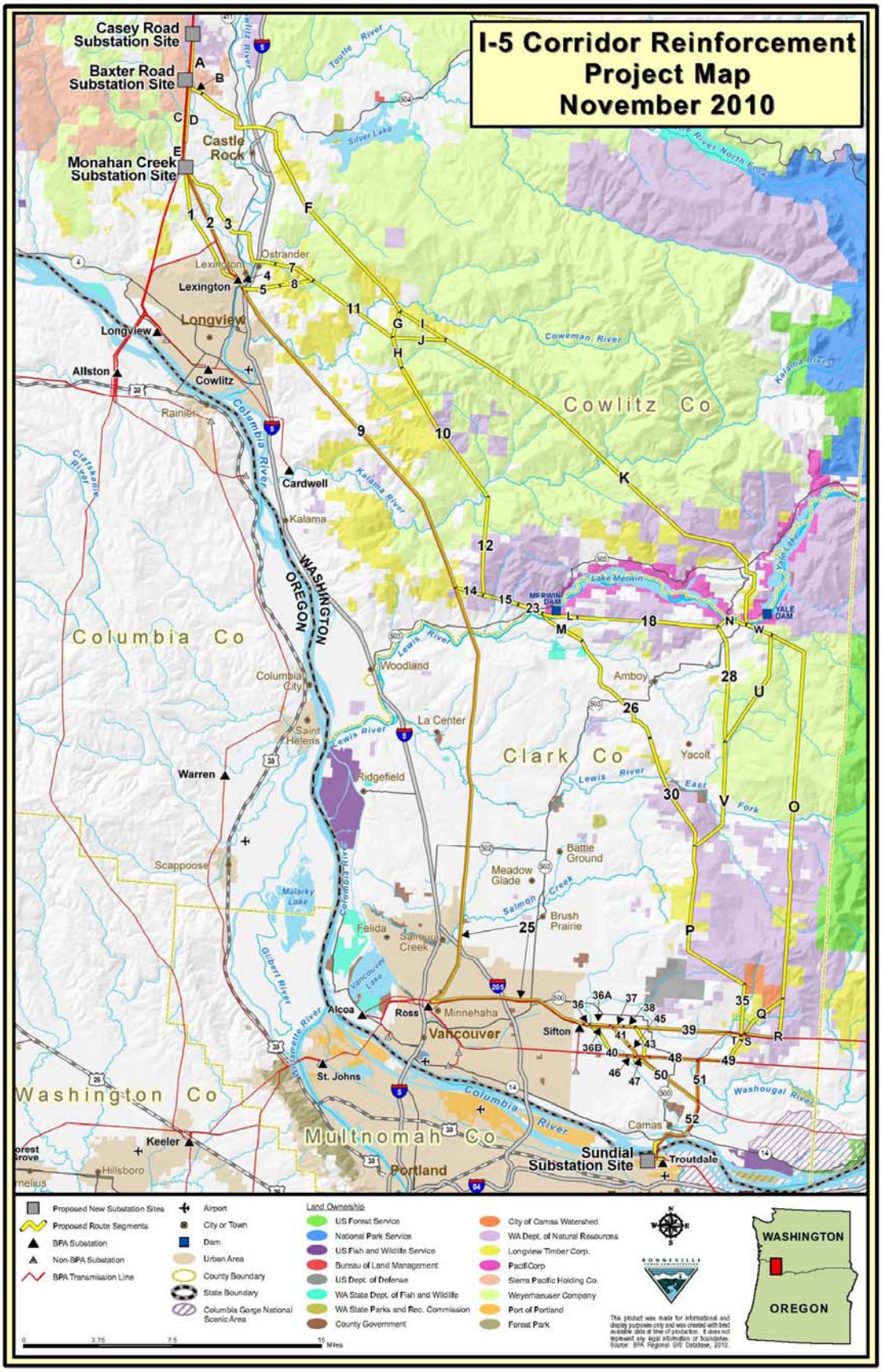
PROJECT DESCRIPTION

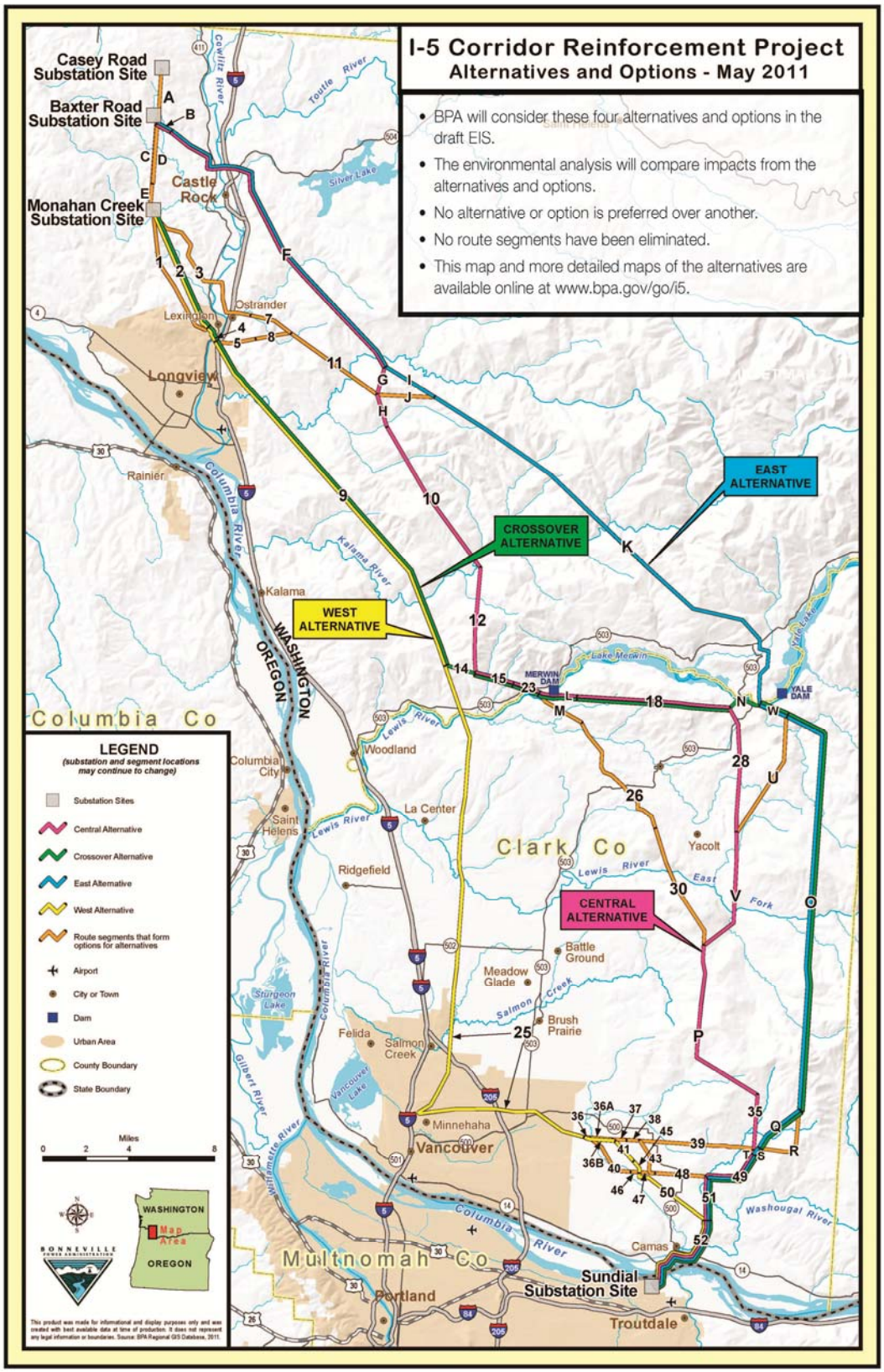
BPA is experiencing growing demand within its existing electrical transmission system in southwest Washington and northwest Oregon. To ease congestion and keep pace with these growing demands, BPA is proposing the I-5 Corridor Reinforcement Project (I-5 Project), a new 500-kilovolt (kV) transmission line and associated substations from Castle Rock, Wash. to Troutdale, Ore. BPA has identified multiple potential route segments for the proposed 70-mile long transmission line to be studied in the EIS.

Since November 18, 2010, BPA has released two new versions of the project map. The November 2010 Project Map (see page 3) is a revised version of the August 2010 Project Map. It includes adjustments to Segments F and 36, and the addition of Segments 36A and 36B. The Alternatives and Options Map, released in May 2011 (see page 4), includes all of the segments depicted on the November 2010 Project Map combined into four route alternatives and additional options as they will be analyzed and compared in the draft EIS. The comments contained in this report are generally related to the information included on these maps and the online interactive project map.

BPA provided preliminary centerline, tower and access road location information on the online interactive project map at http://gis.bpa.gov/gis/i5/gmviewer.html in November of 2011. The map also shows where BPA proposes to use existing or new rights-of-way. Land owners used this information to submit comments about specific impacts the project may have on their properties.

To implement the project, BPA must comply with the provisions of the National Environmental Policy Act (NEPA). The NEPA process is intended to promote better agency decisions by ensuring that high-quality environmental information is available to agency officials and the public before the agency decides whether and how to undertake a federal action. Under NEPA, BPA works closely with other federal agencies and state, local and tribal governments; public and private organizations; and the general public to better understand the potential environmental and community impacts.


I-5 Corridor Reinforcement
Project Map
November 2010
Casey Road Substation Site
Baxter Road Substation Site
Monahan Creek Substation Site
Castle Rock
Lexington
Longview
Allston
Cowlitz
Rainier
Cardwell
Kalama
Columbia Co
Cowlitz Co
Clark Co
Woodland
Columbia City
Saint Helens
La Center
Ridgefield
Warren
Scappoose
Amboy
Yacolt
Battle Ground
Meadow Glade
Brush Prairie
Felida
Salmon Creek
Vancouver
Alcoa
Ross
Minnehaha
Sifton
St. Johns
Washington Co
Multnomah Co
Portland
Keeler
Hillsboro
Camas
Troutdale
Sundial Substation Site
Lake Merwin
Yale Lake
Coweman River
Kalama River
Lewis River
Columbia River
Washougal River
WASHINGTON
OREGON
Proposed New Substation Sites
Proposed Route Segments
BPA Substation
Non-BPA Substation
BPA Transmission Line
Airport
City or Town
Dam
Urban Area
County Boundary
State Boundary
Columbia Gorge National Scenic Area
Land Ownership
US Forest Service
National Park Service
US Fish and Wildlife Service
Bureau of Land Management
US Dept. of Defense
WA State Dept. of Fish and Wildlife
WA State Parks and Rec. Commission
County Government
City of Camas Watershed
WA Dept. of Natural Resources
Longview Timber Corp.
PacifiCorp
Sierra Pacific Holding Co.
Weyerhaeuser Company
Port of Portland
Forest Park
BONNEVILLE POWER ADMINISTRATION
WASHINGTON
OREGON


I-5 Corridor Reinforcement Project
Alternatives and Options - May 2011
• BPA will consider these four alternatives and options in the draft EIS.
• The environmental analysis will compare impacts from the alternatives and options.
• No alternative or option is preferred over another.
• No route segments have been eliminated.
• This map and more detailed maps of the alternatives are available online at www.bpa.gov/go/i5.
Casey Road Substation Site
Baxter Road Substation Site
Monahan Creek Substation Site
Castle Rock
Lexington
Ostrander
Longview
Rainier
Kalama
Woodland
Columbia City
Saint Helens
La Center
Ridgefield
Yacolt
Battle Ground
Meadow Glade
Brush Prairie
Felida
Salmon Creek
Minnehaha
Vancouver
Camas
Sundial Substation Site
Troutdale
Portland
Columbia Co
Clark Co
Multnomah Co
WEST ALTERNATIVE
CROSSOVER ALTERNATIVE
EAST ALTERNATIVE
CENTRAL ALTERNATIVE
OREGON
WASHINGTON
Columbia River
Lewis River
Kalama River
Toutle River
Silver Lake
Lake Merwin
Yale Lake
Sturgeon Lake
Vancouver Lake
Salmon Creek
East Fork Lewis River
Washougal River
Gilbert River
Willamette River
MERWIN DAM
YALE DAM
LEGEND
(substation and segment locations may continue to change)
Substation Sites
Central Alternative
Crossover Alternative
East Alternative
West Alternative
Route segments that form options for alternatives
Airport
City or Town
Dam
Urban Area
County Boundary
State Boundary
Miles
0 2 4 8
WASHINGTON
Map Area
OREGON
BONNEVILLE POWER ADMINISTRATION
This product was made for informational and display purposes only and was created with best available data at time of production. It does not represent any legal information or boundaries. Source: BPA Regional GIS Database, 2011.

SOLICITATION OF SUPPLEMENTAL COMMENTS UNDER NEPA

BPA published a Notice of Intent (NOI) (*74 Federal Register 52482, October 13, 2009*) to prepare a draft EIS for the I-5 Project in the *Federal Register* on October 13, 2009. This initiated the public scoping comment period, originally scheduled to close November 23, 2009. However, on November 18, 2009, BPA extended the comment period to December 14, 2009, in response to requests for more time to submit comments. Following the close of the public scoping comment period, BPA has continued to accept and review comments and will do so throughout the duration of the NEPA process.

In addition to the *Federal Register* notice, BPA directly notified more than 9,000 landowners within a 1,000 foot to one mile buffer of the proposed route segments, as well as other interested individuals, tribes, elected officials, organizations, and agencies in October 2009. On December 21, 2009, BPA dropped Segments 27, 31, 42, and 44 from further consideration for the project. In August 2010, BPA further refined the project segments under consideration by eliminating several route segments and adding others. In November 2010, BPA made adjustments to segments F and 36, and the addition of segments 36A and 36B.

BPA hosted a public meeting on December 8, 2011 to provide project updates and accept public comment. From November 2010 to December 2011, BPA continued to provide project information via mail and email newsletters, hosting information booths at fairs and festivals within the project area, and attending neighborhood and citizen group meetings as requested.

BPA also posted information on the project website at www.bpa.gov/go/i5 and maintained an electronic comment form and phone messaging system allowing visitors to submit comments online at any time.

COMMENT METHODS

BPA continues to invite comments through a variety of methods, including:

- An online form for submitting comments
- Comments that are submitted to a project email address
- A toll free comment and information voice messaging system
- Comment forms and written comments collected at public meetings, neighborhood and citizen group meetings and fairs and festivals
- Verbal comments transcribed at designated public meetings
- Comments that are submitted by postal mail or fax

Though the official public scoping comment period deadline was December 14, 2009, BPA continues to accept and review comments throughout the life of the project. Comments are posted to the project website and may be viewed by the public as they are processed at: http://www.bpa.gov/corporate/i-5-eis/search.cfm.

FAIRS AND FESTIVALS

BPA hosted information booths at six community fairs and festivals during the summer of 2011 to provide project information and an opportunity for the general public to ask questions and submit written comments. BPA representatives attended Amboy Territorial Days, Castle Rock Fair, and Camas Days Street Fair in July, and the Vancouver Farmers Market and Kelso Bridge Market in August and September. Approximately 440 people visited the booths over the course of all six events.

PUBLIC MEETING

On December 8, 2011, BPA hosted a public meeting and listening session to provide updates on the project and accept public comment. Attendees were permitted three minutes each to provide uninterrupted verbal comment. Written comments were also accepted. A transcript of the listening session including verbal comments submitted by attendees is posted on the project website at: www.bpa.gov/go/i5.

The meeting took place in Battle Ground, Wash. and nearly 300 people were estimated to have attended. Thirty-seven people provided verbal comment.

COMMENT ANALYSIS PROCESS

COMMUNICATIONS RECEIVED

This report summarizes the 739 communications processed from November 18, 2010 through December 31, 2011. BPA has received over 3,800 communications since the original *Federal Register* notice on October 13, 2009. Communications were received by BPA through a variety of methods (described in more detail in the section "Comment Methods"). All communications were reviewed to identify information requests that needed follow-up from BPA staff, such as project area map requests, and to identify and categorize comments (see "Processing Communications"). All communications received are included as part of Appendix B, which also includes an index of communications listed alphabetically by commenter. The appendix can be accessed at:

www.bpa.gov/corporate/i-5-eis/documents/BPAI5_SupplementalCommentReport_March2012_AppendixB.pdf

PROCESSING COMMUNICATIONS

Communications for this report were processed in the same manner as the original Scoping Report and the April 2011 Supplemental Comment Report, and according to protocols established for the project. Analysts recorded the name and contact information of each commenter in a computer database. Each communication was assigned a unique identification number and linked to its contact(s). This approach allows analysts to see all communications submitted by each contact.

Communications submitted were saved in portable document format (PDF) according to their unique identification number. The text of each communication was entered into the database. Once a communication was processed, personal information was removed before it was posted to the I-5 Project website. Commenters are able to view the communications they submitted, as well as those of others.

Once the commenters and their communications were entered into the database, analysts read through each communication to identify and code unique comments. Many communications contained multiple comments. The coding system during the initial scoping period was modified to include new categories, such as a new segment and alternative names, as required. Appendix C contains the final coding categories used for this report. Attachments to communications were also coded if they contained additional comments, rather than supporting information.

Each communication was reviewed at least twice – once by the primary coding analyst, and then again by a second analyst. This quality assurance process allows for any discrepancies or inconsistencies to be resolved during the coding process.

Throughout this process, BPA staff maintained access to the comment database, and were able to review and search the database contact information, comment categories, and perform keyword searches. They were also able to use the database to review and respond to information requests.

ANALYSIS METHODOLOGY

This report summarizes key themes distilled from the 739 communications received. This report supplements the original Scoping Report and the April 2011 Supplemental Comment Report and comprehensive review of individual comments by BPA staff. To create this report, analysts queried the database to generate reports organized by each comment category. These reports were used to synthesize comments into summary statements that captured the unique issues and concerns expressed by commenters. This process also served to eliminate redundant themes within the report.

For the purposes of this summary, every comment has equal value, whether it is stated only once or multiple times. The synthesis represented in this report did not seek to tally the number of comments received on any given topic, as scoping is not intended to function as a “voting” process.

COMMENT ANALYSIS RESULTS PER TOPIC

ORGANIZATION OF THIS SECTION

The following sections are organized into categories that reflect the new or different issues and concerns heard for the period of November 18, 2010 through December 31, 2011. These issues and concerns are summarized. The sections do not capture every comment for each category and are not quantified. Quotes highlighted in the comment analysis results are used to illustrate the range of comments received, but are opinions and not intended to represent statements of fact.

PROJECT PURPOSE AND NEED

Commenters requested clarification about the need for the project in light of power oversupply events that occurred in 2011, which required wind power facilities to cease operation. Commenters also doubted the need for transmission reinforcement by describing recent rate hikes by Cowlitz Public Utility District (PUD) in response to California's refusal to buy surplus wind power and new legislation in California that will restrict the state's utilities from buying out-of-state renewable power.

Commenters stated that Portland General Electric (PGE) has already built new transmission south of Portland to address the metropolitan area's energy load. Commenters also relayed assertions by PGE in television commercials stating they have been so successful at energy conservation and efficiency that no additional power is needed in Multnomah County. Commenters also stated beliefs that local power usage is trending downward due to good conservation practices and the poor economy.

Commenters described BPA as a fiscally mismanaged agency with a financial incentive to grow transmission services. Commenters stated that BPA's focus on developing transmission may prevent the agency from identifying solutions that address the larger issue of moving power from distant generation sources to population centers. Commenters thought the need for the project could be eliminated by mandating co-generation facilities in new developments. Commenters also recommended other alternatives to reduce or eliminate the need for the project including focusing on energy storage, energy servers, fuel cells, planting trees and "cool roofs." Commenters also encouraged BPA to use the projected delay in the project construction date identified by the non-wires analysis to implement some of these practices.

Commenters stated that wind power is inefficient and incompatible with BPA's mission to provide access to low cost power. Other commenters acknowledged that incorporating wind power into the existing transmission system is a challenge. Commenters thought that electric cars are not a viable justification for improvements to the transmission system because lithium is in short supply.

Commenters felt that the timing and siting of the project in southwest Washington was motivated by depressed land values associated with the economic downturn. Other commenters further stated that BPA may be motivated to purchase new rights-of-way to plan for future expansion beyond the current project proposal.

Commenters continue to identify California and Oregon power needs as a driver for the project and therefore feel that Washington residents are being inequitably burdened. Commenters stated beliefs that the project was designed to benefit PGE, the Los Angeles Department of Water and Power and power companies in British Columbia. Others described lifestyle choices and future economic growth as driving the need for the project.

PROJECT PROCESS

DECISION-MAKING PROCESS

Commenters had questions about how the non-wires analysis coordinated with the NEPA process and whether the non-wires analysis would be used as the "no-build" option in the draft EIS. Commenters thought BPA misrepresented the non-wires analysis study when asked about it at the November 4, 2010 meeting. Some commenters thought that the non-wires analysis was part of a public relations strategy and questioned why the analysis was not conducted earlier in the process. Others also requested more transparency in the non-wires analysis process and wanted clarification on how it would affect the project timeline in terms of the environmental review process, final project approval date, and proposed construction date.

Commenters had many general comments about the length of the process. They expressed appreciation for the delayed release of the draft EIS until after the 2011 holiday season but also expressed frustration at the further delay in the release schedule.

Commenters inquired whether BPA would add the eastern "grey line" route, developed by citizen groups, to the route evaluation process. Some commenters mentioned that due to the potential for delay of the construction date identified in the non-wires analysis, BPA would have more time to thoroughly evaluate the "grey line."

Commenters continued to request that BPA study a route that goes to the Pearl substation in Oregon and described BPA's reasoning for not adding it as "excuses."

Commenters asked whether BPA would identify a preferred alternative when the draft EIS is released. They also wanted to know whether any other routes would be released from the process at that time. Commenters encouraged BPA to narrow the number of alternatives being studied prior to the release of the draft EIS. Commenters asked whether BPA will study all routes in more detail once the preferred alternative is selected.

Commenters encouraged BPA to elevate consideration of impacts to humans over marginal increases in the delivered cost of electricity and impacts on the natural environment.

PUBLIC INVOLVEMENT

Commenters stated that they did not think BPA has made any changes to the project based on public input. Commenters thought that information BPA provides about the project is deliberately contradictory and elusive. Commenters requested more transparency about comparative costs and requirements. Additional public involvement topics, organized by category, are included below:

- *Notification:*

  Commenters asked how many homes and lots are included in BPA's notification buffer and stated that the notification buffers for existing corridors should be wider.

- *Maps:*

  Commenters explained difficulties using or understanding the online interactive map, as well as difficulties locating individual properties using the GoogleMaps interface. Commenters requested that BPA provide more detailed instructions about how to use the online interactive map. Commenters requested that BPA provide printed maps with more detail for individual properties at outreach events.

  Commenters inquired whether a tower that appears to lack an associated access road meant that it was not seriously under consideration for the project.

- *Public comments and comment period*:

  Commenters asked about the length of the draft EIS comment period and wanted to know if BPA plans to extend it. Commenters suggested that BPA use billboards and a local phone line to solicit public comments.

  Commenters felt that the publication of public comments online did not indicate that BPA was actually reviewing comments closely. Commenters were also concerned that comments submitted to DOE were sent to BPA for a response.

- *Public meetings*:

  Commenters stated that public meetings are held too far apart and that locations are inconvenient for some in the project area. Commenters requested that engineers and specialists are available at meetings to answer questions, rather than public relations staff.

  Commenters expressed frustration that they have already provided feedback to BPA at meetings and BPA has been unresponsive. Commenters also felt that BPA has been dismissive of public health concerns at public meetings.

- *Opportunities for further public participation*:

  Commenters continued to request that BPA form a citizens' advisory committee, particularly to provide local knowledge about conditions within the project area. Other commenters recommended that BPA encourage citizen involvement in planning environmental and wildlife stewardship, fire safety and line security for the project.

  Commenters that have requested site visits inquired why they had not yet occurred.

- *Data:*

  Commenters were concerned that BPA released data for the number of homes along each segment, rather than the number of parcels. Commenters had concerns that preliminary data did not account for segments listed as "options" on the Alternatives and Options map. Commenters further requested that BPA release data about the number of people (families and children) along each segment.

Commenters inquired whether BPA would update previously provided data with the release of the draft EIS. Commenters asked if BPA would provide similar data for eliminated routes to the Pearl substation. Commenters requested that BPA provide the criteria used to create the data sets and post back-up studies that formed the basis of preliminary data released to the public.

REGULATORY OBLIGATIONS, COORDINATION, AND DOCUMENTATION

DRAFT EIS APPROACH AND CONTENT

Commenters wanted to know if content in the draft EIS would be identified with geographic information and what type of geographic information would be used (e.g., Section/Township/Range).

Additional recommendations for draft EIS approach and content are contained within other sections of this report according to the topic area addressed.

COORDINATION

The Board of Clark County Commissioners inquired whether, as a cooperating agency, they would be able to review mitigation measures prior to the release of the draft EIS. The Washington State Department of Natural Resources (WDNR) requested that BPA consult with them to ensure the analyses contained an adequate range of impacts and alternatives and future expansion plans. PacifiCorp requested that BPA coordinate with the Terrestrial Coordination Committee (TCC) that oversees implementation of Wildlife Habitat Management Plans (WHMP) created through the Lewis River Settlement Agreement for lands owned and operated by PacifiCorp and Cowlitz PUD.

Commenters wanted to know when in the process BPA would consult with the Army Corps of Engineers (ACOE) and some felt that BPA has “fast-tracked” the wetland mitigation process with the ACOE. Commenters reminded BPA of its responsibility under the Endangered Species Act to consult with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS).

Commenters had questions about whether BPA would need to obtain specific permits or be in compliance with local and state regulations, particularly related to the Washington State Forest Practices Act.

PROJECT DESIGN

GENERAL PROJECT DESIGN COMMENTS

Commenters wanted more information about remedial action schemes and how they influenced project design. Commenters debated the necessity of separating the two 500-kV transmission lines that would serve the area. They wanted BPA to perform a statistical analysis of the probability of a service interruption disaster or terrorist attack and explain the history of such events.

Commenters offered feedback on BPA's non-wires analysis for the project. Commenters said costs presented in the initial study should have been analyzed in terms of total replacement cost of the transmission project rather than savings from a delay in construction. They thought that the non-wires analysis should account for avoided costs due to the measures being more socially acceptable options and less likely to attract resistance from the public. Commenters also cautioned BPA that pursuing non-wires measures and planning for the transmission line concurrently would increase overall project costs. Commenters also thought that BPA underestimated the role and cost-effectiveness of energy efficiency as a non-wires measure, given recent agency findings.

PROJECT COSTS

Commenters wanted more information about costs for each of the proposed alternatives, the "grey line" route proposed by citizen groups and for undergrounding the power line. Commenters encouraged BPA to take into account direct and indirect costs, outside of construction costs including quality, service/responsiveness, environmental impact and litigation.

Commenters debated the role of cost in the overall design of the project. Many commenters felt that spending more on the project to extend the transmission line and place it in unpopulated areas or put it underground was justified because the cost would be distributed to all ratepayers on BPA's system, resulting in a minimal increase in the end consumer's rates. Many commenters continued to state the power would ultimately benefit Oregon and California, and that the end users should finance the project to removing the burden on communities in southwest Washington. Commenters also were concerned that California has defaulted on utility payments. Commenters compared the project cost to the amount BPA spends on fish and wildlife mitigation annually.

Others felt that the total cost of the project is an important consideration and it should be kept as low as possible. They mentioned the current economic situation, stating that government agencies have a responsibility to control costs and remain solvent.

Some commenters pointed out that the new line will carry wind power, which they considered to be inefficient and lead to an increase in rates.

TRANSMISSION LINE DESIGN

TOWER, SUBSTATION, AND TRANSMISSION LINE DESIGN

Commenters had a variety of questions related to project design. Specific design questions included:

- Will the towers need lights and what type of lights?
- What is the feasibility and what are the advantages and disadvantages of co-locating transmission lines of both similar and different voltages?
- Will the transmission towers withstand snow/thaw/ice cycles common in the northeastern portion of Clark County?

Commenters recommended that BPA explore using the most modern and aesthetically-pleasing tower structures, offering examples from Holland and Finland.

WDNR requested the EIS provide detailed information about the exact location, size and potential impacts that could result from the Casey Road substation. They requested consistency with WDNR's Road Maintenance and Abandonment Plan at the Casey Road substation and that BPA explore a fee ownership transfer rather than an easement for substations.

TRANSMISSION RIGHTS-OF-WAY

Commenters stated that the existing rights-of-way along Segments 9 and 25 were specifically designed for expansion and had questions about the characteristics of the existing transmission line.

Commenters requested that transmission rights-of-way follow the edges and borders of property lines, rather than bisecting them. Commenters stated that some of the existing proposals bisect properties, and may unnecessarily orphan timber acreage. Commenters asked how ownership and harvesting rights to timber within a right of way are handled. Commenters requested that BPA work with timber land owners to create a mutually agreeable fire prevention and suppression plan.

Commenters inquired whether BPA could install gates or fences along the right-of-way to restrict access and requested that BPA clearly mark the boundaries of its right-of-way. Commenters asked BPA to minimize electrocution risks by establishing a minimum clearance of two-thirds of the span between towers from schools and homes in the event that a tower falls by wind, ice, landslide or earthquake.

LINE DESIGN AND ELECTRIC AND MAGNETIC FIELDS

Discussion of line design and electric and magnetic fields (EMF) can be found in the section "Health and Safety, Electric and Magnetic Field Effects."

UNDERGROUNDING LINES

Commenters questioned BPA's assertions that undergrounding a transmission line would incur greater costs and requested that BPA provide the cost per mile for putting the lines underground. Commenters emphasized that undergrounding transmission lines could prevent damage from natural disasters, such as earthquakes. Commenters suggested placing the transmission line in flexible conduit. Commenters also thought that undergrounding lines could reduce the risk of electrocutions.

TRANSMISSION TECHNOLOGY

Commenters recommended that the project be postponed until BPA can more adequately understand the long-term implications of new technologies in transmission and alternative fuels. Commenters requested that BPA analyze the feasibility of replacing existing overhead lines with superconductor technology.

GENERATION/DISTRIBUTION

Commenters asked which direction power would flow on the new transmission line. Commenters wanted to know if the project had any interconnections with the proposed 750-kV systems on the Midwest power grid.

TRANSMISSION LINE CONSTRUCTION

Commenters asked if acreage would be needed for the assembly and delivery of towers by helicopter. Commenters requested that BPA contractors provide fire protection during construction near timberlands. They also requested that BPA repair or pay for any damage to agricultural lands during construction of the line.

ACCESS ROADS AND RIGHTS-OF-WAY

ACCESS ROAD SITING

Commenters wanted more information about how preliminary access road locations were selected. Commenters felt that BPA has not discussed the impacts associated with access roads as much as rights-of-way and some stated that they would occupy more private land. Commenters stated that alternatives to placing access roads through private properties should be found, particularly where roads on WDNR land are available.

Commenters wanted to know the process for resolving conflicts about where the proposed access road would go. Commenters identified locations where roads actually do not exist or are inadequate or inappropriate for heavy equipment. Commenters described specific areas where improvements will need to be made including a temporary bridge over King Creek, Beaver Pond Road and Sugarpine Road.

Commenters described specific adjustments that could be made to access roads on their properties to avoid impacts to wells, septic tanks, gardens or other vegetation, walking trails, streams, driveways, play areas and buildings. Commenters described locations that would be difficult to access due to steep hillsides.

Commenters wanted to know whether easements would be purchased for access roads and also specifications for widths, dimensions, slope, radius of turns, frequency of drainage culverts, ditches, size of culverts and frequency of herbicide treatment. Commenters had questions about the dimensions of new and existing roads and whether cut and fill slopes were included in the widths. Commenters wanted to know if BPA will compensate landowners for representation in negotiations about access road design on their property.

NUISANCE/SAFETY/MAINTENANCE ISSUES

Commenters had additional comments about nuisances including theft of firewood and timber and arson or other fire damage originating in the right-of-way. Commenters noted that even if a transmission tower is not located on their property, trespassers could gain access from adjacent properties.

Commenters had general questions about fences and gates for accessing the towers from the access road and maintenance practices, particularly during inclement weather. Commenters requested BPA conduct an assessment of landslide potential for access roads to determine road grades. Commenters requested that BPA rock access roads for dust abatement, stability, load bearing and according to seasons of use. They wanted to know if BPA plans to access towers year-round and some had concerns about BPA's ability to utilize access roads unexpectedly, at any time, for maintenance. Commenters had concerns about having to pay for damage or maintenance costs for access roads. Commenters wanted to know the dimensions of the equipment that would be using the access roads. They also wanted to know how common it is for BPA to remove additional vegetation to accommodate large equipment.

Commenters requested that BPA enter into mutually agreed upon standards or contracts with impacted landowners that address the following:

- Managing and controlling short- and long-term impacts of unauthorized public use
- Inspection and maintenance schedules
- Reporting requirements
- Maintenance standards
- Road construction
- Abandonment standards
- Cost sharing
- Planning and coordination of road use
- Damage assessments
- Landowner notifications for road blockages
- Coordinating security and with law enforcement

ACCESS ROAD CONSTRUCTION

Commenters inquired whether BPA could also make improvements to sidewalks while improving access roads. Commenters wanted to know if utilities located underground and adjacent to access roads would be replaced and/or relocated. They also wanted to know more about culvert replacement. Commenters had questions about whether BPA would re-vegetate cut and fill banks and whether the landowner could also grow vegetation there. Commenters wanted to know if rebuilt roads could be surfaced with the same type of materials previously in place.

Commenters wanted to know if concrete trucks would be used during the construction phase and whether they would use access roads. WDNR requested that BPA comply with their standards for

construction and maintenance of access roads and complete an Road Maintenance and Abandonment Plan.

Commenters requested that in areas managed for wildlife, access road construction include:

- Additional access control
- Erosion prevention
- Management of water control structures at stream crossings
- Management of vegetation buffers to conceal big game or other wildlife
- Monitoring and enforcement of disturbance to wildlife

PROJECT MONITORING AND MITIGATION

MITIGATION AND MONITORING OF IMPACTS TO NATURAL RESOURCES

Commenters wanted to know if wetland and habitat mitigation would occur on or near the site where impacts occur. Other commenters wanted generally to know if proposed mitigation would be route-specific or if the measures would benefit all Clark County residents.

Commenters requested that BPA provide mitigation for the following:

- Fire risks and susceptibility, as well as imposing limitations on firefighting efforts
- Erosion from off-road vehicle access
- Water pollution from herbicide use
- Loss of woody debris in riparian habitats and tributaries
- Loss of ecosystem function, ecological integrity, habitats and wildlife where the project conflicts with existing WHMPs, Habitat Conservation Plans and Incidental Take Permits
- Loss of conservation capacity on conservation properties and easements

WDNR requested that BPA use agreements with King County on the Kangley-Echo Lake Transmission Line Project Record of Decision (ROD) as a basis for minimizing short- and long-term environmental, economic, and social impacts.

ROUTE SEGMENTS AND ALTERNATIVES

BPA received additional comments on the 61 proposed route segments and the four more recently formulated alternatives and options. Comments included discussion of recommended siting alternatives, including both general preferences and specific suggestions based on several criteria and siting concerns. Recommendations referenced one or more of the proposed route segments or alternatives, suggested changes to these routes, and proposed new route alternatives.

SITING CONSIDERATIONS

Commenters thought that adjustments BPA made to the easternmost routes do not achieve the objective of avoiding impacts to all private landowners. Some commenters also stated that routes using public land, but bordering private land, needed to be moved further east, away from private properties. Commenters stated that potential litigation costs from private landowners should be included in the cost analysis for each alternative.

Commenters also recommended minor adjustments to proposed segments, primarily to reduce viewshed impacts and EMF concerns and avoid wells, wetlands and mature stands of trees along segments F, K, P, 37 and 43.

Commenters identified criteria BPA should use to make transmission line siting decisions and discussed their recommendations for the development of project alternatives. The following are criteria and recommendations for various route alternatives; segments and other geographic locations are referenced where mentioned by commenters.

PHYSICAL DESIGN

- Alternatives that avoid harsh weather influences

SOCIAL AND ECONOMIC

- Alternatives that apply the precautionary principle related to EMF exposure and public health
- Alternatives that avoid disproportionate economic impacts on rural communities
- Alternatives that avoid siting the line on ridgelines where they create greater viewshed impacts
- Alternatives that do not impact the City of Vancouver's most significant viewsheds of Mount Hood

LAND USE

- Alternatives that use Weyerhaeuser land because it was perceived that the company would eventually sell off its land for real estate development and spur growth in the area
- Alternatives that support future energy demand growth and expansion
- Alternatives that avoid infringement on private property rights
- Alternatives along existing rights-of-way and/or easements because they were believed to have proven reliability, stability and security, use less ratepayer funds, preserve rural countryside and rural open spaces, minimize environmental impact, are less vulnerable to severe weather conditions and are already impacted by transmission infrastructure

- Alternatives that avoid small, private properties where there is a larger proportional impact on the landowner
- Alternatives that avoid remote and heavily forested terrain where security, vandalism and fire risks are more difficult to manage
- Alternatives that avoid using proposed school sites, particularly along Segment 43
- Alternatives that avoid bifurcation of WDNR-managed trust lands, such as to the east of WDNR's Yacolt Block, along the boundary of Gifford Pinchot National Forest
- Alternatives that do not violate the WDNR trust land management mandates or do not adequately mitigate, minimize or avoid disproportionate impacts to state trust lands
- Alternatives that avoid WDNR-managed trust land transfer parcels or parcels which are identified in potential land transactions
- Alternatives that avoid genetically selected tree areas (Genetic Reserves), particularly near Segment 30
- Alternatives that avoid forest riparian conservation easements held by the state of Washington
- Alternatives that do not violate the Forest Practices Act, specifically Segment P
- Alternatives that avoid the Lacamas Prairie Natural Area
- Alternatives that avoid Columbia Land Trust conservation properties
- Alternatives that avoid small, family tree farms, particularly where harvesting practices involve longer rotations and smaller cuts

NATURAL RESOURCES

- Alternatives that avoid lands managed for wildlife, such as PacifiCorp's WHMP lands in the Lewis River watershed
- Alternatives that cross creeks, rather than follow alongside them
- Alternatives that avoid pristine natural environments, such as the Western Yacolt Burn State Forest
- Alternatives that avoid migratory bird habitat, particularly around Segment 40
- Alternatives that avoid habitat specifically identified for or linked to threatened and endangered species

ROUTE ALTERNATIVE RECOMMENDATIONS

Commenters felt that there have been too few alternatives under consideration. Commenters requested that BPA analyze and compare costs of crossing state lands versus federal lands, particularly given a recent federal decision that expedites siting and construction of qualified electrical transmission infrastructure on federal lands.

Citizen groups designed and mapped an additional alternative running more northerly and easterly than BPA-proposed alternatives, commonly referred to as the "grey line." Commenters stated support for adding the route to the environmental review process because it could:

- Affect fewer people
- Affect fewer private properties
- Reduce loss in property value
- Reduce loss in property tax revenue
- Limit visual impacts
- Reduce the potential for health concerns related to EMF
- Allow for future expansion of the transmission system

Commenters also stated that the "grey line" would have little impact on spotted owl habitat, as BPA has asserted. They also stated a preference for impacting wildlife and forests over impacting humans.

Commenters stated that additional costs associated with this routing should be considered acceptable in order to protect human health. They also considered the additional cost acceptable because they believed Oregon, California and Canada would be the ultimate beneficiaries and should pay the added cost in rates. Commenters thought the added cost would create a minimal impact on the rates passed on to electric consumers by utilities. Others believed that the cost would not be significantly increased because of the assessed valuation of timberlands and public lands would be low compared to individual private properties. Commenters also stated that American Recovery and Reinvestment Act (ARRA) stimulus funds could be recycled to other public agencies facing financial hardship.

Others noted that the "grey line" would cause impacts to private timber farms and to federally-listed spotted owl habitat on WDNR land and near Swift Dam.

Commenters wanted BPA to evaluate the "grey line" and an unpopulated Oregon route in the draft EIS. Some commenters wanted BPA to drop all other alternatives and only study these two options. Commenters stated that if the "grey line" is not evaluated in the draft EIS the East Alternative should be modified such that it does not impact any homes.

SOCIO-ECONOMICS

GENERAL SOCIO-ECONOMIC COMMENTS

No additional comments at this time.

COST TO LANDOWNERS

Commenters thought that evaluation of alternatives should also include the cost for landowners to move to avoid safety risks. Commenters described leaving friends and neighbors because they may feel compelled to move if the project comes through their property. Commenters state that an easement across their property could ruin plans to pass property on to family members. Commenters described plans to purchase additional investment properties that have been put on hold.

WDNR requested that BPA analyze the effects, restrictions and other threats of BPA's proposed corridors on WDNR trust management activities that occur outside of the right-of-way and prevent effective management of lands, particularly where it will disallow, limit or increase the cost of timber harvest, timber hauling, wind power production, solar energy development, communication sites, recreation use, or eliminate the potential for a special land management option.

Commenters described potential losses in future value of land for hunting leases, recreational uses, and carbon credits.

Commenters discussed eminent domain, easement, and compensation issues. Further discussion can be found in the section "Eminent Domain and Compensation."

LOCAL, REGIONAL, AND STATE ECONOMY

Commenters requested that BPA analyze the long-term and recurring lost economic opportunity costs to local governments in Clark and Cowlitz counties. Commenters specifically mentioned that the project would acquire or affect lands in Cowlitz County that have a high economic growth potential. Commenters also requested that BPA analyze impacts to local economies, specifically focusing on timber and recreation industries.

Commenters described Cowlitz County as an economically depressed area and stated that a lot of people have their wealth tied to their property.

INCOME, BUSINESS OPERATIONS, AND EMPLOYMENT

Commenters described an aggregate mine located near a proposed right-of-way and stated that the mine would incur greater production costs and this may also limit their ability to market aggregate to a wider customer radius.

Commenters stated that the impact to small timber farms would have proportionally greater income ramifications as compared to commercial timber properties. Commenters requested that BPA

compensate timber farmers for the cost of transitioning their lands to different types of crops. Commenters were concerned that taking timber lands out of production could harm individuals whose sole income and training is from that particular activity and they requested to have training for another trade. Commenters explained that timber farms also support other jobs for sawmills, construction, restaurants and trucking and retail stores.

Commenters stated that BPA should compensate agricultural landowners for present and future losses that would be incurred due to the line and for any resulting increase in operating costs. Other commenters described losing land that could be used for cattle, timber, bed and breakfasts or real estate development in the future. Commenters described potential impacts to small, organic farms.

Commenters were concerned that the transmission line could effectively shut down camps and recreational properties because they would no longer be able to attract as many guests and visitors to their facilities.

Commenters stated that construction of the transmission line would create jobs.

WDNR requested that BPA:

- Calculate lost revenue to the state over the next fifty years for impacted aquatic licenses, leases, easements and sales
- Analyze and avoid impacts to the potential future revenue from biomass production, carbon credits and development rights on WDNR land
- Quantify and analyze the economic impact on long-term trust revenue where the corridor will disallow, limit or increase the cost of timber harvest and timber hauling, or managing for other special forest products or agricultural land uses
- Determine the effects on WDNR's timber harvest through removal of lands using WDNR's harvest modeling software

TAXES

Commenters stated that converting timber land to a transmission easement would change their special tax status and also potentially cause them to owe back taxes.

SCHOOLS AND EDUCATION OPPORTUNITIES

Commenters provided additional information about the number of schools located within varying distances from the proposed transmission line alternatives. In addition to concerns about schools in previous reports, commnenters specifically mentioned Orchards Elementary.

The Camas School District identified a WDNR trust parcel that it plans to purchase for a future high school and/or middle school. The property is bisected by proposed Segment 43. They emphasized the difficulty in finding parcels that meet the school district's criteria.

HOUSING

Commenters requested that BPA analyze population, home site and structural densities in the EIS.

DEMOGRAPHICS

Commenters wanted to dispel a commonly held assumption that the Yale Valley is sparsely populated, stating that it is home to over 150 permanent residents and 300-400 total residents. Other comments described that larger amounts of people would be affected if the line went through more dense, urban areas.

QUALITY OF LIFE

Commenters stated that being able to view wildlife from their home increased their quality of life and that a new transmission corridor could potentially drive wildlife away.

HEALTH AND SAFETY

GENERAL HEALTH AND SAFETY COMMENTS

Commenters continued to provide studies and sources of information about EMF and health risks. Commenters directed BPA to use the principle of prudent avoidance in managing health risks that may be associated with the project. Commenters were concerned that BPA would not compensate for any health expenses incurred by living within close proximity to the line. Commenters believe that BPA is violating NEPA by creating an unsafe environment for local citizens to live in.

In addition to the health effects described in previous reports, commenters stated that living near transmission lines could result in a higher incidence of asthma. Commenters noted the potential for electronic interference with medical devices such as neurostimulators or Vagus nerve stimulators and implanted metal plates. Commenters also were concerned that living near a line could compromise the health of individuals taking immunosuppressive drug treatments. Commenters had concerns that farmland would be poisoned with toxic defoliants and pesticides that have been linked to lymphoma.

Commenters stated that horseback riders would be tempted to ride in the right-of-way and subject themselves to EMF exposure and potential health risks.

ELECTRIC AND MAGNETIC FIELD EFFECTS

GENERAL ELECTRIC AND MAGNETIC FIELD EFFECTS COMMENTS

Commenters doubted BPA assertions that houses and trees can play a role in shielding EMF. Commenters inquired whether EMF travels in all directions from the transmission line.

HEALTH EFFECTS

Commenters inquired whether placing a 230kV and 500kV transmission lines next to each other would concern the state health department.

ELECTRONIC AND MAGNETIC INTERFERENCE

Commenters were concerned about interference with citizens' band (CB) radio, analog recording equipment, any equipment that uses unshielded lines and potential damage to reel-to-reel tapes or cassettes. Commenters also described properties where cell phone towers and emergency communications towers exist. Commenters wanted to know if the transmission line would interfere with household appliances, underground wiring and plumbing.

Commenters requested that BPA analyze and avoid negative impacts to the current use or reasonably foreseeable future development of communications sites including WDNR's Larch Mountain and Casey Road sites.

TRANSMISSION LINE DESIGN

Commenters stated that distances as much as 500 feet from the transmission line were unsafe for families.

EMF AND COMMUNITY SAFETY

COMMUNITY SAFETY

Commenters identified concerns related to a variety of community safety issues. Physical safety issues included:

- Arcing from vegetation near the transmission line, particularly if the line is built in the existing right of way because it is believed that it would increase the likelihood of arcing
- Risk of shock near antennas installed on property or for firefighters responding to home fires
- Ice falling from towers or damaged conductors falling from the towers

Additionally, commenters were concerned about vehicles using access roads with small children present on the property.

WDNR requested that BPA follow state laws for extreme fire hazard abatement along transmission corridors in forested areas.

NOISE

Commenters described potential conflicts with recording music in their home and stated that noise from the transmission line could impact their ability to record. Commenters requested that BPA use noise

studies that are reflective of the project area, rather than data from Kennewick, Wash., which is subject to fewer foggy days. Commenters stated that noise from construction could affect the ability of schools to operate.

AESTHETICS

Many commenters disliked seeing transmission towers directly in front of their homes and inquired whether adjustments could be made in final design phases to minimize viewshed impacts. Commenters specifically described that the power lines would detract from their view of sunsets and Fargher Lake, the East Fork of the Lewis River and on riverfront parcels. Others described specially designing homes to block out views of existing power lines. Commenters requested that BPA compensate landowners for loss of viewshed quality, particularly in locations where an easement is obtained on an adjacent property.

CUMULATIVE IMPACTS

WDNR requested that BPA describe and analyze cumulative impacts that may result from unauthorized use and damage to state lands and public resources (e.g., garbage dumping, trail building, off-road vehicle use, vandalism and theft) by conducting a sample survey on a given portion of existing power line representative of public land ownership and prepare a quantitative prediction of unauthorized use and impacts. WDNR also requested that BPA include the costs to repair or mitigate predicted damage. They also requested that BPA disclose potential impacts the project could have on WDNR's regulatory and non-regulatory programs such as Geology and Earth Resources, Forest Practices and Fire Protection.

Commenters noted that Clark County has already lost large amounts of rural open space in the last 50 years and that a new transmission corridor could compound the problem. Commenters stated that property values are already depressed due to the economic downturn. Timber farms have also already lost income due to the housing market crash. Commenters stated that creating impacts in Washington state is unfair, particularly considering that Washington state already receives very little benefit from BPA's investments in fish and wildlife habitat projects.

LAND USE

EXISTING AND PLANNED LAND USES

Commenters suggested that old transmission rights-of-way should become obsolete after a certain period of time and moved to less developed areas. Commenters stated that since the existing right-of-way along Segments 9 and 25 was purchased, the land use patterns around it have changed significantly. Commenters stated that living near an existing 230kV line did not justify the installation of larger transmission infrastructure.

Commenters discussed potential impacts to existing land uses within the notification area. Commenters identified the following general land uses that were not contained in previous reports:

- Churches
- Apartment complexes
- Rental properties
- Wildlife areas
- Tree farms

Commenters identified areas with specific land use designations and relationships to comprehensive planning efforts, including:

- Designated natural and priority habitat areas, such as Lacamas Prairie Natural Area
- Conservation areas and easements, including the Copper Creek Conservation Area and other Columbia Land Trust properties
- Forest research plots and Genetic Reserves
- Properties participating in reforestation programs
- Properties participating in and receiving grants from the Washington State Firewise Program
- Timberlands zoned as Forest Tier I and II
- Waterways protected under the Shoreline Master Plan
- Washington State Recreation and Conservation Office grant-funded properties
- Riparian Management Zones and Wetland Management Zones as established under the Forest Practices Act
- WHMP mitigation lands owned by PacifiCorp and Cowlitz PUD, which would require Federal Energy Regulatory Commission approval to be used as a transmission corridor

WDNR made requests for agreements and memorandums of understanding for placement of the transmission corridor on WDNR property. Some of these related to waterways, vegetation and fire suppression activities. Other commenters wanted to know whether BPA would abide by the Forest Practices Act on lands owned by WDNR.

TRANSPORTATION

No additional comments at this time.

RECREATION

Commenters described additional recreational areas that could be impacted by a transmission line, including golf courses and areas used for snowshoeing. Commenters requested that BPA allow all-terrain vehicle groups to use their rights-of-way for recreation purposes in exchange for stewardship of the right-of-way.

Commenters mentioned potential impacts at specific locations, including:

- A proposed extension of the existing Lacamas Lake Trail, managed by the Clark County Parks Department
- Moulton Falls Scenic Hiking Trail

WDNR requested that BPA analyze impacts to current and planned WDNR-provided recreation opportunities in the Larch (Yacolt) block, as outlined in the Yacolt Burn Recreation Plan to include a cost projection for recreating its implementation schedule to account for BPA's impacts to recreation.

MINING

Commenters described existing and future rock quarry operations. One rock quarry was described as providing a rare source of jetty material to the Northwest. Some future operations are planned to occur within a proposed right-of-way. Commenters also described nearby blasting operations that could conflict with a transmission line.

EMINENT DOMAIN AND COMPENSATION

Commenters provided criteria for valuation, compensation and stipulations for leases on lands that are used for timber production. Commenters wanted to know if they would be compensated for timber removed outside of the right-of-way. Property owners requested that BPA provide compensation for them to hire professional services to help negotiate easement purchases.

Commenters stated that BPA should offer to buy any homes from home owners that feel uncomfortable living near the new transmission line. Commenters recommended that compensation be determined by a board that is not affiliated with BPA or any government agency. Commenters wanted to know what would happen if they did not agree to the price that price BPA offers for the easement.

WDNR requested that BPA quantify and analyze the economic impact on long-term trust revenue and use this as a basis for mitigation and the creation of a compensation plan for the life of the project.

NATURAL RESOURCES

Commenters provided a wide range of comments on the effects of transmission line construction and operation on natural resources within the study area. Commenters discussed impacts to wildlife and habitat, including upland areas such as forests, meadows, and prairies; riparian habitats; and aquatic in-stream habitat and species.

GENERAL WILDLIFE/HABITAT COMMENTS

Commenters stated that rural routes would have a greater impact on wildlife. Commenters had concerns about whether defoliants or herbicides would cause widespread fatalities among wildlife.

Commenters expressed concern about impacts to wildlife and habitats and limitations on effective management of wildlife on lands under conservation status or that are managed through existing WHMPs. These specifically included:

- *Route segments*: K, L, M, N, O, W
- *Other areas*: Columbia Land Trust conservation and conservation easement properties; mitigation lands included within the Lewis River Settlement Agreement governing the environmental provisions of the Lewis River Hydroelectric Projects operated by PacifiCorp and Cowlitz PUD managed through the TCC

NATIVE WILDLIFE/HABITAT (UPLAND)

Commenters discussed concerns about the removal of snags, which serve as habitat for wildlife. Commenters identified populations of Western red cedar and black cottonwood trees along Segment L that provide diversified habitat for wildlife, particularly where they are located near commercial, homogenous Douglas fir stands.

Commenters identified multiple species and habitats on or adjacent to their properties that could be impacted by a transmission line, including large and small mammals, a variety of birds, reptiles and amphibians, and insects. Particular native wildlife species and habitats mentioned are included in the following sections.

AMPHIBIANS AND REPTILES

Commenters identified additional locations where amphibians and reptiles were present within the project area, including:

- *Species:* Cope's giant terrestrial salamander
- *Route segments*: P
- *Other areas*: North Fork of Lacamas Creek

BIRDS

Commenters described observing different types of birds throughout the project areas. Some described studies and documentation of specific species and potential flight paths and roosting, perching, foraging and nesting sites. Commenters stated that raptors are particularly susceptible to overhead transmission lines because they fly with their wings overhead. Others suggested avoiding areas where dense populations of migratory waterfowl gather and stated that collisions and avian botulism could result.

- *Species:* kingfishers, tundra swans, pygmy owl, cedar waxwings
- *Route segments*: 10, 12, K, M, V, W

- *Other areas*: Speelyai Creek, North Fork of Lacamas Creek, Lacamas Natural Area and floodplain, Copper Creek Conservation Area, below Yale Dam near Canyon Creek, Merwin Dam

SMALL MAMMALS

Commenters identified additional locations where small mammals were present within the project area, including:

- Species: fishers
- *Route segments*: 50, K
- *Other areas*: Speelyai Creek, upper Kalama River, Kalama River watershed, Copper Creek area

LARGE MAMMALS

Commenters stated that transmission corridors can provide good elk forage habitat, but can also contribute to vulnerability due to increased visibility to humans. Commenters stated that a transmission corridor may make it difficult to manage habitat on lands designated for elk populations. Commenters stated that elk are more likely to be found on private properties than adjacent commercial forests. Commenters identified additional locations where large mammals were present within the project area, including:

- *Species:* blacktail deer, black bear
- *Route segments*: K
- *Other areas*: North Fork of Lacamas Creek, Kalama River watershed, Copper Creek Conservation Area, north of Lucia Falls Road

INSECTS

Commenters identified additional locations where insects were present within the project area, including:

- *Route segment*: 30, P

RIPARIAN AND AQUATIC WILDLIFE/HABITAT

Commenters described riparian and aquatic habitat and species that could potentially be impacted by transmission line siting. Commenters identified species, habitats, spawning grounds, seasonal drainages, as well as lands designated for habitat protection, habitat improvement and conservation projects. Commenters expressed concern about the removal of riparian habitat buffers and altering hydrologic conditions that may support wildlife populations. Commenters recommended that BPA consider replanting native vegetation where trees must be removed to help preserve riparian function. Specific locations identified included:

- *Route segments*: K, W
- *Other areas*: Boulder Creek, Jones Creek, Speelyai Creek, North Fork of Lacamas Creek, Copper Creek Conservation Area, Lacamas Prairie Natural Area (specifically, Lacamas Creek floodplain), mitigation lands included within the Lewis River Settlement Agreement governing the environmental provisions of the Lewis River Hydroelectric Projects operated by PacifiCorp and Cowlitz PUD managed through the TCC

WETLANDS

Commenters expressed concern about BPA's ability to clear and fill wetlands when private citizens are so severely restricted in wetland areas. Commenters described locations where a proposed right-of-way would clear portions of existing wetland buffers. They were also curious why BPA's data showed the most impact to wetlands along the West Alternative, particularly because it is primarily existing right-of-way and located in a more urbanized area.

Commenters identified additional wetlands that may potentially be impacted. Specific wetland areas mentioned include:

- *Route segments*: 18, 30, 41, 45, K, L, O, P, W
- *Other areas*: Lacamas Creek floodplain, Beaver Brook Estates

FLOODPLAINS

Commenters specifically identified the Lacamas Creek floodplain and stated that construction of a new transmission line could alter hydrologic conditions within it and its associated wetlands.

SURFACE AND GROUND WATER RESOURCES

Commenters continued to describe springs and groundwater resources within the project area. Commenters were concerned about potential contamination to springs that provide drinking water, are used for emergency situations and to water livestock, and were concerned about potential contamination. Commenters were concerned that the project could impact surface water sources used for the City of Camas' water supply.

Commenters thought that the project could impact waters designated as "Type 3" waters under the Forest Practices Act. Commenters were also concerned that clearing vegetation around surface waterways could raise water temperatures and increase turbidity. Commenters requested that the EIS identify and analyze stormwater management for potential substation locations.

Commenters mentioned specific surface and ground water resources in addition to those previously mentioned in the Scoping Report, including:

- North Fork of Lacamas Creek, Little Washougal watershed, Boulder Creek, Gobar Creek, Jones Creek, Wildhorse Creek

Additional discussion of water quality can be found under the section “Resources, Riparian/Aquatic.”

NATIVE VEGETATION

Commenters asked for clarification on the vegetation clearance widths along rights-of-way and for “hazard trees,” particularly in heavily forested areas near stands of old growth forest or where lands are managed for wildlife. Commenters requested that BPA analyze forest densities and estimate and model the amount and location of “danger” trees that would require removal in the EIS. Commenters emphasized that lands currently or previously managed for timber harvest are more susceptible to “blow-down.” Commenters described reforestation efforts on their property that aimed to restore soils, and provide habitat to wildlife displaced by commercial timber harvests.

Commenters requested that BPA identify all vegetation management activities that would occur within and outside of the right-of-way. They also requested that BPA identify areas outside of the right-of-way that would require maintenance of low-growing vegetation, particularly where there are trees upslope of the line and diseased or undesirable species. Commenters described the importance of low-growing vegetation such as grasses, sedges and ferns that serves as wildlife habitat along streams. Commenters requested that BPA create a plan for promoting the growth of low-growing native plants and shrubs along streams where they are crossed by the right-of-way to maintain reasonable water temperatures.

Commenters mentioned specific species and areas of concern, including:

- *Species*: Indian pipe, snow drops, rhododendrons, thimbleberry, serviceberry, kinnikinnick, Oregon grape
- *Route segments*: F
- *Other areas*: recreation areas near Western Yacolt Burn State Forest

NON-NATIVE VEGETATION

Commenters requested that BPA comply with county, state and federal noxious weeds rules or existing requirements on commercially-managed lands. They also requested that BPA’s integrated pest management plan is approved by landowners along the right-of-way. Other commenters inquired whether BPA could maintain the right-of-way manually instead of using herbicides.

Commenters wanted to know if BPA would use a “broadcast” spraying of broadleaf herbicide that would leave only non-native grass or cover in place. Commenters requested that BPA only use pesticides approved for use in forests and follow Forest Practices Act rules regarding pesticide use. Commenters were concerned that access roads could create vectors for non-native invasive species.

Commenters identified species of concern within the project area, including:

- *Species*: thistle
- *Route segments*: 26

THREATENED, ENDANGERED, AND SENSITIVE SPECIES

PacifiCorp and Cowlitz PUD described potential conflicts with the Biological Opinion they were issued by the USFWS. The conflicts could affect their ability to manage threatened species on WHMP lands, specifically for the northern spotted owl. They also described the conflicts with losing stands of old-growth or mature conifer that serve as nesting and dispersal sites for Northern Spotted Owl.

WDNR also requested that BPA analyze impacts on threatened and endangered species that are currently included in WDNR's Incidental Take Permit and Habitat Conservation Plan. They requested to be involved in any ESA consultation with USFWS or NMFS that may result in noncompliance with the permit and plan. They also requested that BPA include a draft Biological Assessment or Biological Opinion in the final EIS.

Commenters identified listed or sensitive species that are documented, observed or believed to be within the project area and described habitat areas that support these populations, including:

- *Species*: searun cutthroat trout, great grey owl, mountain quail, Cascade torrent salamander
- *Route segments*: 27, 41, K, W
- *Other areas*: Kalama River and surrounding watershed, East Fork of the Lewis River, Wild Horse Creek, Gobar Creek, Lacamas Prairie and Lacamas floodplain, Beaverbrook Estates, Summer and Winter Steelhead Threatened Species Areas in King Creek, Lower Columbia Fish Recovery Plan areas, mitigation lands included within the Lewis River Settlement Agreement governing the environmental provisions of the Lewis River Hydroelectric Projects operated by PacifiCorp and Cowlitz PUD managed through the TCC

AIR QUALITY AND CLIMATE

No additional comments at this time.

CULTURAL AND HISTORIC RESOURCES

No additional comments at this time.

GEOLOGY AND SOILS

Commenters described the potential difficulty of building access roads at specific locations throughout the project area due to steep slopes or poor soils.

Commenters described specific areas that they believed to be susceptible to landslide or erosion due to steep slopes, including:

- Segments: 3, 27, 43, O

WDNR requested that BPA analyze geologic hazards, including:

- Landslide hazards using WDNR's statewide landslide database
- Unstable slopes using WDNR's Shalstab model of landforms in the Landslide Hazard Zonation projects
- Slope hazards associated with slope modification or vegetation removal at construction areas
- Seismic shaking potential on the Lacamas Lake Fault as well as movement potential
- Corridor locations in moderate to high liquefaction sensitive areas by using GIS modeling

ENVIRONMENTAL JUSTICE

Commenters stated that the line is being sited through two counties with modest incomes when they believe it will ultimately benefit more wealthy counties.

NEXT STEPS

BPA staff and contractors are continuing to collect and analyze more information about the route alternatives, options, access roads, and substation sites. The route alternatives and options will be evaluated and compared in the draft EIS. The draft EIS is expected in spring 2012. BPA will publicly circulate the draft EIS and solicit additional comments during a public comment period. BPA will then revise the draft EIS and address all comments received in a final EIS. A record of decision is expected in 2013 that will identify the agency's decision on whether or not to build the project. At that time, if the decision is to build, a final route would be identified.

APPENDIX A – PUBLIC NOTIFICATION MATERIALS

Following the close of the public scoping comment period, BPA distributed two additional mailings to landowners and interested parties to inform them of project developments, including the following:

- December 21, 2009 – Letter announcing the release of Segments 27, 31, 42 and 44 from the NEPA process
- August 2, 2010 – Letter announcing refinements to the segments included in the project study area

No additional official notifications were distributed from November 18, 2010 through December 31, 2011. However, project updates were distributed periodically. All project notifications and updates can be found on the project website at www.bpa.gov/go/i5.

APPENDIX B – COMMUNICATIONS RECEIVED

Appendix B includes all communications received between November 18, 2010 and December 31, 2011 and is available on the project website at:

www.bpa.gov/corporate/i-5-eis/documents/BPAI5_SupplementalCommentReport_March2012_AppendixB.pdf

If you do not have access to the Internet and would like to receive a CD or hard copy of this appendix (426 pages), please call our toll free document request line at 800-622-4520 and leave a message with your name and mailing address, and ask for "I-5 Project Supplemental Comment Report, March 2012, Appendix B." Please specify CD or hard copy.

APPENDIX C – CODING CATEGORIES

The following comment categories were used to code individual comments contained within each communication included in the supplemental comment report. Each communication was given a unique number, and each comment within the communication was categorized by subject. Categories assigned to comments included the following:

Transportation
Land Use
Eminent Domain
Irrigation
Mining
Wetlands
Floodplains
Water
Electromagnetic fields
Noise
Air quality
Fish/wildlife
Water fowl
Passerine birds
Migratory birds
Raptors
Bats
Amphibians/reptiles
Small mammals
Large mammals
Fish (non-salmon)
Invertebrates
Threatened/endangered species
Salmon
Cultural resources
Alternatives/siting
Project need
Cumulative impacts
Project design
Process design
Economics
Employment
Income
Taxes/taxpayers
Cost to landowners
Mitigation/monitoring
Visuals
Permits
Other
Data request
Recreation
Access/road construction
Vegetation/weeds
GHG/climate change
Geology/soils
Social issues
Demographics
Public services
Housing
Education
Community Safety
Environmental justice
Health
Segment 1
Segment 2
Segment 3
Segment 4
Segment 5
Segment 6
Segment 7
Segment 8
Segment 9
Segment 10
Segment 11
Segment 12
Segment 13
Segment 14
Segment 15
Segment 16
Segment 17
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Segment 36A
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Segment 52

Segment A
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Segment C
Segment D
Segment E
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Segment G
Segment H
Segment I
Segment J
Segment K
Segment L
Segment M
Segment N
Segment O
Segment P
Segment Q
Segment R
Segment S
Segment T
Segment U
Segment V
Segment W
Lexington Substation
Castle Rock Substation
Ross Substation
Sifton Substation
Troutdale Substation
Baxter Creek Substation
Casey Road Substation
Monahan Creek Substation
West Alternative
Crossover Alternative
Central Alternative
East Alternative