SCOPING SUMMARY

I-5 Corridor Reinforcement Project

Prepared for:

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TABLE OF CONTENTS

INTRODUCTION

HOW TO USE THE REPORT

The Bonneville Power Administration (BPA) is a federal agency under the U.S. Department of Energy that serves the Pacific Northwest through operating an extensive electric transmission system and marketing wholesale electrical power. The purpose of this Scoping Summary is to identify and synthesize the issues raised by individuals, organizations, and agencies during the scoping comment period for the I-5 Corridor Reinforcement Project (I-5 Project). It does not contain a listing of all the comments received, but distills the comments into key themes.

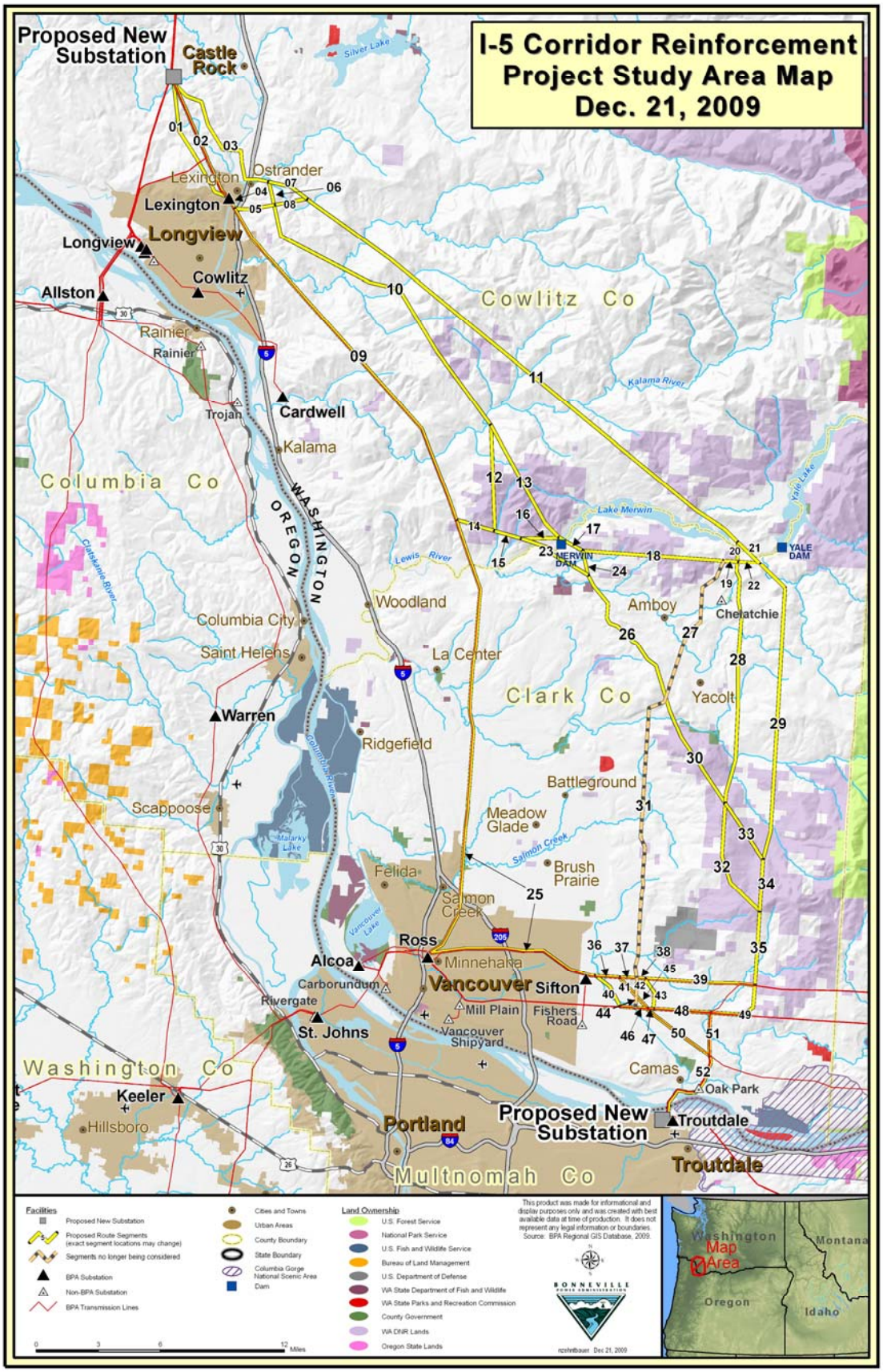
BPA is analyzing the scoping comments it received to determine issues of concern to stakeholders that will help shape the scope of the environmental analysis and the alternatives considered in the draft environmental impact statement (EIS). Comments submitted during scoping help ensure that reasonable alternatives are analyzed and considered early in the process.

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 Project, a new 500-kilovolt (kV) transmission line and associated substations from Castle Rock, Washington to Troutdale, Oregon. BPA has identified multiple potential route segments for the proposed 70-mile long transmission line.

A project area map displaying these route segments is on Page 2.

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 these potential environmental impacts.


I-5 Corridor Reinforcement
Project Study Area Map
Dec. 21, 2009
Proposed New Substation
Castle Rock
Silver Lake
Lexington
Ostrander
Longview
Cowlitz
Allston
Rainier
Trojan
Cardwell
Kalama
Columbia Co
Cowlitz Co
Kalama River
Lake Merwin
Yale Lake
YALE DAM
MERWIN DAM
Lewis River
Clatskanie River
WASHINGTON
OREGON
Woodland
Columbia City
Saint Helens
La Center
Amboy
Chelatchie
Yacolt
Clark Co
Warren
Ridgefield
Columbia River
Battleground
Meadow Glade
Salmon Creek
Brush Prairie
Scappoose
Malarky Lake
Felida
Salmon Creek
Vancouver Lake
Ross
Alcoa
Minnehaha
Vancouver
Sifton
Carborundum
Rivergate
Mill Plain
Fishers Road
St. Johns
Vancouver Shipyard
Washington Co
Camas
Oak Park
Keeler
Hillsboro
Portland
Proposed New Substation
Troutdale
Multnomah Co
Facilities
Proposed New Substation
Proposed Route Segments (exact segment locations may change)
Segments no longer being considered
BPA Substation
Non-BPA Substation
BPA Transmission Lines
Cities and Towns
Urban Areas
County Boundary
State Boundary
Columbia Gorge National Scenic Area
Dam
Land Ownership
U.S. Forest Service
National Park Service
U.S. Fish and Wildlife Service
Bureau of Land Management
U.S. Department of Defense
WA State Department of Fish and Wildlife
WA State Parks and Recreation Commission
County Government
WA DNR Lands
Oregon State Lands
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, 2009.
BONNEVILLE POWER ADMINISTRATION
rzehntbauer Dec 21, 2009
Washington Map Area
Montana
Oregon
Idaho

SOLICITATION OF 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 (Appendix A). The scoping period began with the issuance of the NOI and was originally scheduled to close November 23, 2009. On November 18, 2009, in response to requests for more time to submit comments, BPA extended the comment period to December 14, 2009.

In addition to the *Federal Register* notice, BPA notified more than 9,000 landowners within a 1,000 foot to 1 mile buffer of the proposed route segments, as well as other interested individuals, tribes, elected officials, organizations, and agencies. The notification packet included a letter announcing the project and scoping period, a project fact sheet, project map, comment form, and return envelope (Appendix B). A separate letter and Permission to Enter Property form was sent to landowners with property within the proposed route segments.

BPA sent a press release to local media, and placed paid ads in the following newspapers about public scoping meetings:

- Battle Ground Reflector – October 13, 2009 and October 18, 2009
- Camas-Washougal Post-Record – October 13, 2009 and October 21, 2009
- Gresham Outlook – October 14, 2009 and October 28, 2009
- The Oregonian – October 14, October 18, and October 28, 2009
- The Columbian – October 14, October 18, and October 26, 2009
- Longview Daily News – October 13, 2009 and October 18, 2009

BPA also posted information on the project Web site at www.bpa.gov/go/i5 with an accompanying Web electronic comment form allowing visitors to submit comments online.

COMMENT METHODS

BPA invited comments through a variety of methods, including:

- An online Web form for submitting e-comments
- A comment and information voice messaging system
- Comment forms collected at public meetings
- Comment forms that could be mailed or faxed to BPA
- Written and verbal comments recorded by BPA staff at the public scoping meetings

Comments were accepted through December 14, 2009. Comments were posted to the project Web site so that they could be viewed by the public as they were processed.

PUBLIC SCOPING MEETINGS

BPA held six open house-style public scoping meetings at the locations listed in the table below.

Meeting Date	Meeting Location	Meeting Attendance*
October 27, 2009	Amboy, WA	547
October 28, 2009	Vancouver, WA – Clark College	465
October 29, 2009	Longview, WA	614
November 3, 2009	Camas, WA	480
November 5, 2009	Gresham, OR	47
November 7, 2009	Vancouver, WA – Hazel Dell	344

* This column reflects the number of people who signed the meeting sign-in form. Some members of the public declined to sign the form.

Each meeting featured eight stations with topic-specific project information and BPA staff available to answer questions. In addition, maps were available to help landowners locate their property in relation to the route segments. BPA staff recorded verbal public comments in their notes and also on flip charts positioned at each station. A comment station provided members of the public an opportunity to complete a comment form.

Over 2,500 people attended the public scoping meetings. Each meeting was summarized, and meeting summaries were posted to the project Web site the next work day after each meeting.

COMMENT ANALYSIS PROCESS

COMMUNICATIONS RECEIVED

The scoping period began October 13, 2009 and after an extension, closed December 14, 2009. BPA received over 3,000 communications during the scoping period. 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 analyze comments (see "Processing Communications"). All communications received are included in Appendix C. Appendix C also includes an index of communications listed alphabetically by commenter.

PROCESSING COMMUNICATIONS

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 allowed analysts to see all comments submitted by each contact.

Communications received at the public open houses via staff notes or flip chart notes were entered directly into the database. Linked contact information is somewhat limited for these open house-based comments. All other 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 Web site. Commenters were 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. A coding system was established prior to the start of the comment period that corresponded to different comment categories. Codes were also created that corresponded to the individual route segments and the proposed substation sites. This system was created based on the anticipated variety

of comments related to a transmission line project. Because the list of codes was developed prior to the coding process, not all of the codes were used. Appendix D contains the final coding categories used for this project. Some attachments to communications were also coded, depending on whether they contained additional comments, versus supporting information.

Each communication was reviewed at least twice – once by the primary coding analyst, and then again by a second analyst entering the comments into the database, or during the preparation of this scoping summary. This design allowed 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 over 6,900 comments. This report complements the comprehensive review of individual comments by BPA staff during the scoping period. 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 value, whether it is stated only once or multiple times. The analysis represented in this report did not seek to tally the number of comments received on any given topic, as this information 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 issues and concerns heard during the scoping period. These issues and concerns are summarized and 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

A number of issues were identified regarding the project's purpose and need. Commenters said that improvements to transmission infrastructure are necessary and overdue and that the current system presents challenges to the reliable delivery of energy. As such, commenters noted that reinforcing the transmission system will provide the capacity needed to avoid power blackouts, meet demand for economic development and growth, improve quality of life and security, and provide utility customers with access to existing and new forms of energy, including renewable electricity.

Others commented that corridor reinforcement is not necessary and that the current system operates well. Commenters said that the current transmission network has diversity and that the proposed segments east of I-5 will not provide additional diversity, primarily due to similar weather patterns affecting both existing and new lines. Additionally, commenters questioned the need for new transmission lines when BPA already has existing lines.

> *"If no [new] transmission line, then [we] will need new power plants in NW that would have more impacts."*

Commenters said that catastrophic events do not threaten the existing transmission system and that historic precedent does not necessitate the redundancy often mentioned by the project team. Some said the example of an airplane hitting the existing transmission lines is unlikely.

Some commenters did not see a clear need or local demand for additional power in the area and questioned who would consume this energy. Commenters said that new transmission lines sited in southwest Washington should not be used to carry power to other areas, states, and provinces, including Canada, California and Oregon, and out of the area to the east. Commenters expressed concerns that Washington would bear the impacts of the transmission lines, while the power would be used elsewhere. Some said that the project should not be considered at this time, given the current state of the economy.

Commenters further questioned the need and demand for new transmission when industries are leaving the West Coast. Commenters said that power that was used for vacated industrial use should be adequate to supply growth in the area. Others questioned the stated project need since they believe power consumption has decreased. Others commented that BPA has other purposes for building a new transmission line, including biomass and wind energy developments and transmission of energy out of the region.

Other comments were related to energy consumption and power generation. Commenters said that the project enables consumption of energy, that the transmission system should be limited to its current scope, and that BPA should focus instead on conservation and energy efficiency or home-based generation using alternate technologies such as wind or solar. Commenters said that the electricity distribution process should be modernized to eliminate the need for 500-kV transmission lines. Commenters asked whether consideration had been given to power generating facilities closer to the

end user. Other commenters said that renewable energy sources mentioned by the project team are neither plentiful nor reliable.

Commenters said that the draft EIS should specify the underlying purpose and need for the proposed transmission line, including discussion of the planning process, power needs, power markets, customer bases, power transmission technologies, cost-effectiveness, financing, energy conservation, and any other power transmission issues that may be appropriate.

PROJECT PROCESS

DECISION-MAKING PROCESS

BPA received comments about their decision-making process, which included requests for information regarding their process, the process timeline, and schedule. Commenters asked who has the authority to make the routing decision, and whether scoping is the public's last opportunity to influence BPA's decision-making process.

Commenters said that BPA should reveal the study's criteria for decision-making. Others commented that the schedule for decision-making was too long and that any interim decisions about route eliminations should be made available to the public as soon as possible. Commenters also expressed concerns that the data used in the analysis be up to date and independent.

Commenters said that BPA should not decide to site a transmission line through small towns and rural areas simply because there are fewer voters and complaints.

PUBLIC INVOLVEMENT

In addition to decision-making process issues, commenters also expressed concerns regarding public involvement. Public involvement issues included:

- *Notification*: Commenters stated concerns about project notifications. Comments noted inconsistencies in project notifications, including instances where some neighbors received mailings and others did not. Some said that the permission to enter property letters were difficult to understand. Commenters were also concerned about the three-year access agreement requirement. Others said that the wording in the permission to enter property letters and forms was "heavy-handed." Commenters said that notifications should be sent to landowners within ¼ mile of the proposed transmission lines to account for land and resource impacts, public health and safety reasons, and aesthetic impacts.

> *"I also urge you to provide better notification to property owners and citizens who would be impacted not just those within the proposed right-of-way."*

Commenters said that the project's schedule and notification did not provide adequate time for comment and/or to attend a public meeting. Commenters said that information about the project could have been more specific about how people could be affected by the proposed segments and that many people were unnecessarily upset.

Commenters said it was important for BPA to regularly notify the public of project updates and progress on the planning process through mailers and other means and that public meetings should be advertised in a wider variety of news media. Many commenters expressed concerns about having to wait for BPA to make its decisions, and the potential impacts of that "limbo" period. Commenters recommended that the proposed segments be narrowed down in the spring of 2010.

Additionally, commenters questioned BPA response times to e-mails and voicemails, as well as how questions would be addressed.

> *"[I]t is very important for BPA to mail out updates on this project regularly and inform all concerned openly and with frequent notification as to progress of the planning process."*

- *Maps:* Commenters said that project overview maps did not provide enough detail to discern whether their properties were potentially impacted and the addition of roads and other landmarks would be helpful. Others commented that some detailed project maps were inaccurate or had outdated aerial imagery.

- *Comment period*: Commenters said that the comment period was too short and should be extended to allow more of the public to comment, especially those that were unable to attend a public scoping meeting. Commenters also said that they should have received more advanced notice of the meetings and the scoping period. Commenters thanked BPA for extending the comment period past its initial cutoff date, noting that it allows for a larger portion of the public to share their perspectives on the proposed project. However, some commenters requested that BPA further extend the comment period.

- *Public meetings*: Some commenters stated they liked the public scoping meeting format, while others stated a preference for an "open microphone" or "town hall" format because it would allow them to hear what others in the community thought and would also provide an opportunity to receive responses to their common questions. Some questioned whether the open house meeting format without a presentation was intended to keep information from the public. Commenters said they hoped a forum type of meeting format would be used for meetings during the draft EIS phase of the project.

  Commenters also said that more public meetings should have been scheduled, that public meeting locations were inconvenient and not representative of some communities within the project area, that public meetings did not have adequate parking, that the meetings should have more maps and tables available to the public, and that they would like to have neighborhood-based meetings in the potentially affected areas.

Commenters said that the scoping meeting summaries were repetitive, did not identify community questions, and did not provide BPA's answers to these questions.

- *Opportunities for further public participation*: Commenters asked how homeowners can participate in detailed design reviews during the transmission line siting process to address their concerns and those of the community. Commenters recommended that a citizen's committee be formed to provide "continuous input" to BPA throughout the process.

REGULATORY OBLIGATIONS, COORDINATION, AND DOCUMENTATION

Commenters stated opinions about the scope of the draft EIS, the NEPA process, and other regulations and coordination that should be met as BPA prepares the draft EIS analysis and documentation.

DRAFT EIS APPROACH AND CONTENT

Commenters said that the draft EIS should comprehensively analyze and disclose the direct and indirect environmental and socio-economic impacts of construction and operation alternatives and address the likely effectiveness of any mitigation activities.

Commenters emphasized the need to determine "baseline resources information" across all areas of study in order to assess potential environmental, social, and economic impacts (including cumulative impacts) and support transmission line construction and operation recommendations that will be protective of resources and used to direct appropriate mitigation and monitoring measures. This effort to develop a baseline of information should include identification of areas where knowledge is lacking and where additional information is needed.

Commenters recommended that the draft EIS include tables, maps, figures, charts, photos, etc., to present and display specific features of alternatives to ensure they are clearly understood. In addition, it was suggested that information be organized in a manner that allows for comparison of alternatives, such as a matrix table that summarizes major features and significant environmental impacts.

> *"[S]harply define issues for the decision maker and the public to make in regard to a reasoned choice among alternatives."*

COORDINATION

Commenters said that analyses conducted during the draft EIS process should coordinate and integrate with other planning and environmental review processes (e.g., permitting requirements) so that all such procedures run concurrently rather than consecutively.

Commenters reminded BPA that the draft EIS should list all federal permits, licenses and other entitlements which must be obtained in implementing the proposal.

In addition, commenters stressed the need to coordinate with local, state, federal, and tribal governments and other utilities with respect to their regulatory purview and potential impacts on land use, fish and wildlife, recreation, historic preservation, cultural resources, and other considerations.

Further discussion of draft EIS and study requirements can be found under specific discussion sections, including: Project Design, Socioeconomics, Land Use, and Natural Resources (Surface and Ground Water Resources, Geology/Soils, Native Wildlife/Habitat, Riparian/Aquatic Wildlife/Habitat, and Cultural Resources).

PROJECT DESIGN

GENERAL PROJECT DESIGN COMMENTS

Many commenters recommended that BPA consider the "No Action" alternative as the benchmark used to analyze other alternatives.

Commenters outlined the need for the draft EIS document to include an explanation of the details and rationale for the establishment of the analysis area boundary.

> *"An appropriate analysis area should encompass the potentially affected environment, and should be able to function as an appropriate unit of analysis for projecting anticipated impacts and for measuring actual effects."*

Commenters also said the draft EIS should identify and discuss transmission line right-of-way, power transmission technologies, the likely present and future energy generation units to be served by the transmission line, energy conservation, cost-effectiveness, financing, and other power transmission project design issues.

TRANSMISSION LINE DESIGN

TOWER, SUBSTATION, AND TRANSMISSION LINE DESIGN

The physical design of project facilities was a concern to commenters. Some asked about transmission line height restrictions, the location of the towers, and the footprint of the substations. Others expressed a preference for single-pole tower design.

Commenters said that above ground towers are vulnerable to downed lines from ice, wind, and snow, which can be unsafe and lead to power outages. Some were concerned that use of transmission towers undermines the U.S. dollar because they are constructed of imported steel.

Commenters said that tall towers and airway markings were stated as the primary reasons an alternative into Oregon was not proposed, but the crossing of the Columbia River from Camas to Troutdale would have no less impact than using existing crossings into Oregon at Longview or Vancouver.

TRANSMISSION RIGHTS-OF-WAY

Commenters identified issues related to existing rights-of-way, as well as easement design. Commenters said that the use of existing rights-of-way is preferred due to fewer costs being incurred, existing access infrastructure, and fewer additional visual impacts, health issues, and conflicts with existing property uses. In addition to electricity transmission rights-of-way, BPA should consider alternatives that use major north/south-running gas rights-of-way. Additionally, commenters noted that it might be easier to maintain and patrol the existing routes with existing rights-of-way.

Others questioned whether adding another line to the existing right-of-way would solve reliability issues. Commenters said that cleared rights-of-way leave trees on the edges vulnerable to wind and should be buffered. Commenters said that siting a transmission line in existing 100-foot rights-of-way, such as the Pacific Power and Light easement, would require another 50 feet of easement and likely that adversely affect due homes and property to development of these properties up to the existing easement.

Commenters suggested that new towers sited along an existing transmission line should be aligned with existing towers to reduce overall visual impacts. Commenters also stated that transmission circuits could be doubled to allow for the use of existing rights-of-way as well as to cancel-out electric and magnetic radiation fields from existing and new lines.

Comments included suggestions for alternative uses of transmission rights-of-way, including use for growing commercial forest products such as Christmas trees and native plants.

Commenters recommended using the existing rights-of-way be analyzed for technical feasibility, environmental impacts, costs, and other factors.

Commenters asked about the design of right-of-way buffers and whether the proposed 150-foot rights-of-way were adequate for the tower height and voltage to be protective of human health, safety, and property, including exposure to electric and magnetic fields and proximity to septic systems and wells. Commenters also questioned why Segment 9 has a 300-foot right-of-way for a 230-kV transmission line, while other segments would only have a 150-foot right-of-way for a 500-kV transmission line. Commenters suggested that the easement should be larger for higher voltage transmission lines.

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 said the proposed transmission line should be buried underground, instead of overhead on towers. Benefits noted for undergrounding transmission lines included aesthetics, noise, improved reliability/decreased outages, decreased impacts on home values, decreased impacts to birds/aircraft,

decreased risk of accidents, narrower easements, improved system efficiency, and quicker installation. Commenters asked if the transmission lines could cross the river underground.

Commenters noted while undergrounding lines may be more expensive up-front, over the long-term it is less expensive due to its reliability, combined with their other avoided costs on people and the environment. Commenters said that other states require transmission lines of certain voltage and/or proximity to homes and public facilities be buried.

> *"Evaluate options for underground installation, especially in private residential areas."*

Commenters recommended that use of underground transmission lines be analyzed for technical feasibility, environmental impacts, costs, and other factors. Undergrounding of the transmission lines should be considered in areas with scenic values to reduce visual impacts. Commenters also recognized that transmission line undergrounding could result in additional impacts to soils and vegetation as well as increased construction costs.

TRANSMISSION TECHNOLOGY

Commenters asked that BPA consider using buried superconductor technology to reduce health and environmental impacts, aesthetic issues, and allow for more power to be transmitted. Commenters noted that underground channels used for burying a transmission line should be large enough to allow for future conversion to superconductor technology. Commenters also recommended that BPA consider other technologies, such as direct current energy, Smart Grid technology, as well as strategies and technologies designed to reduce transmission losses.

Commenters suggesting use of existing lines also recommended that the lines be altered to transmit more energy. Commenters said the transmission towers should be augmented to be combined with other future technology such as high speed rail and wind energy.

Additionally, commenters questioned why BPA would not take this opportunity to install fiber optic cables, rather than do this at a later time.

> *"Methods of increasing the ability to transmit more energy over existing transmission lines and associated rights-of-way include, but are not limited to:*
>
> 1. *Reconductor existing lines with state-of-the-art high ampacity conductors.*
> 2. *Strengthen existing line towers and convert from single conductor phases to bundled conductor phases.*
> 3. *Retire existing lower voltage lines and replace them with 500 kV lines on the same right-of-way."*

GENERATION/DISTRIBUTION

Commenters said that transmission lines should be sited to accommodate planned and future generation projects, including biomass and wind. Others said they opposed the use of new lines to transmit energy from biomass- and fossil fuel-based generating sources. Additionally, some commenters recommended that BPA look into using renewable, neighborhood energy sources such as solar. Other

comments questioned the assumption that current hydroelectric sources will continue to provide the same amount of power in the future.

Commenters recommended that BPA analyze which existing, planned, or proposed generation projects would be enabled by this project and their fuel sources, as well as how these projects will exceed the renewable energy generation goals for the Pacific Northwest, excluding California, and how they relate to reduction in greenhouse gases. Other recommendations included analyzing how the market-driven request queue can justify the need for condemnation of private property, as well as analyzing increases in revenues and profits of energy marketing and trading companies using the transmission lines.

Others commented that the process for delivery of energy should be modernized to eliminate the need for 500-kV transmission lines. Commenters asked whether consideration had been given to de-centralized power generating facilities closer to the end user. Commenters recommended having companies compete to use the transmission lines and consider energy efficiency strategies.

Commenters also asked BPA to consider whether a new substation will be needed half-way between Troutdale and Castle Rock.

TRANSMISSION LINE CONSTRUCTION

Transmission line construction was another issue identified by commenters. Commenters said that BPA should use project labor and materials solely sourced from U.S. companies, that all materials should be domestically produced, and local labor should include all skill levels.

"...all labor and materials used for the proposed lines are solely sourced from U.S. companies based in Washington State and domestically produced."

Commenters expressed concerns about BPA's approach to assessing the value of land that would be condemned. Please refer to the section "Eminent Domain" for additional discussion of this topic.

Commenters said that the draft EIS should analyze disturbance to soils and vegetation during construction, and that impacts to rivers, streams, water quality, fish, wildlife and scenic, recreation, or cultural resources from construction activities should be avoided and/or minimized as much as possible.

ACCESS ROADS AND RIGHTS-OF-WAY

ACCESS ROAD SITING

Commenters identified existing roads that could be used for access to transmission lines and reduce project costs by eliminating the need to build new roads. Specific suggestions included the City of Camas access road (NE Boulder Creek Rd.) and existing logging roads, including roads in the Yacolt Burn area.

Additionally, commenters identified areas that would be difficult to access for construction and maintenance purposes. Commenters said that annual flooding occurs in areas for periods of several

days. Also mentioned was a damaged bridge crossing Rock Creek that would need to be repaired in order to construct and maintain a transmission line in the area. No bridge access exists for trucks across Cedar Creek, which are currently required to travel through hills to the west to reach this area. Specific route segments identified that may present access difficulties include Segments 10 and 11.

Commenters recommended that a line should be sited where paved streets for easy maintenance are already established. Some comments cited snow and ice conditions prohibiting access to some areas; others commented that winter conditions should not create an access and maintenance problem for BPA.

NUISANCE/SAFETY/MAINTENANCE ISSUES

In addition to siting issues, commenters identified their concerns related to nuisance, safety, and maintenance issues. Commenters said that access roads attract multiple nuisances, including trespassing, vandalism, criminal activity, drug operations, transient/homeless use, trash dumping, animals (especially coyotes), game poaching, shooting, and off-road vehicle (ORV) use (all-terrain vehicles and motorcycles). Commenters said that home and property security could be affected by access road misuse. Commenters noted that building new roads will open undisturbed lands to nuisance uses.

> *"I'm concerned about the recreational use of motorcycles and ATVs along the rights-of-way or private property. This could be a liability for the property owners and that is scary and disturbing. For current BPA lines, how much is this a problem? Is there a way you can prevent that access."*

Commenters said that private property owners would be liable for ORV riders on BPA easements. Commenters said BPA would need to address this issue, perhaps by listing the property owner as an additional insured party on insurance policies for such liabilities.

Commenters had general concerns with maintenance in the right-of-way, including brush and downed-tree clearance responsibilities. Comments also addressed concerns about pesticide use to control vegetation, which is both toxic and persistent in the environment and may pose a health risk to people and wildlife.

ACCESS ROAD CONSTRUCTION

Commenters said that construction activities will create noise and traffic congestion. Commenters suggested that construction be rotated across sites so that activities occur no more than 2 days per week at any single site.

Commenters' construction-related concerns included:

- Congestion from heavy equipment may be worse in areas where local roads are narrow. In addition, work crew vehicles themselves will add to the number of vehicles on the road.

- Steep topography and narrow roads may pose safety issues for local residents. In addition, commenters were concerned the integrity of residential access roads would be compromised or damaged as a result of construction activities.
- Access road construction could interfere or impact agricultural activities, depending on the season, including damage to land and the growing and harvesting of crops.
- Access road construction poses a risk to waterways, particularly in hilly areas where there is not currently a street system. Commenters were concerned about such construction and sediment in waterways.

PROJECT MONITORING AND MITIGATION

MITIGATION AND MONITORING OF IMPACTS TO NATURAL RESOURCES

Comments addressed a variety of monitoring and mitigation measures. Commenters said that the draft EIS must demonstrate that impacts to surface and ground water, riparian areas, wetlands, wildlife, and aquatic species will be adequately mitigated, and that all applicable water quality and other standards will be maintained.

Commenters said that BPA should install appropriate deterrent devices to prevent bird injuries and fatalities, that bird kills from line strikes could be significant, and that monitoring should be conducted to ensure that mitigation measures are effective.

> *"Descriptions of mitigation measures that would deter birds from flying near power lines should be a part of the EIS."*

Commenters said that potential mitigation measures for preventing the spread of noxious weeds should include cleaning equipment tracks and tires prior to transportation to uninfested sites, reseeding disturbed sites early, and using only certified weed-free seed.

Commenters discussed additional areas where mitigation and monitoring of project impacts may be needed including:

- Whether county governments or BPA would pay for road diversion, widening, or bike lanes associated with project construction.
- Compensation for loss of agricultural uses.
- Requirement of mitigation for impacts to sites or facilities where certain grant funds may have been applied.
- Requirement of mitigation for impacts to any areas of designated as having tribal historic or religious significance.

- Mitigating transmission line placement in neighborhoods by creating community amenities like walking or biking trails and skate parks.
- How BPA would monitor noise and correct or mitigate noise that exceeded acceptable levels.
- Monitoring of private wells for potential drinking water contamination due to use of pesticides in the right-of-way.
- Performance monitoring to ensure mitigation measures are achieving their objectives.

ROUTE SEGMENTS

BPA received comments on the proposed 52 route segments. Comments included discussion of recommended siting alternatives, including both general preferences and specific suggestions based on several criteria and siting concerns. Recommendations included one or more of the 52 route segments, suggested changes to these routes, and new route segments.

ROUTE ALTERNATIVE RECOMMENDATIONS

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; where mentioned, route segments and other areas are referenced.

PHYSICAL DESIGN

- Alternatives that avoid rough terrain and high elevation.
- Alternatives for substations that are at the intersection of transmission lines, including a suggestion that the Castle Rock Substation be sited underneath existing transmission lines north of Ogden Road.
- Alternatives that connect with existing and planned power generation sites. Specific sites mentioned include the Chelatchie Prairie biomass generator and wind developments on Larch Mountain and in Eastern Oregon.
- Alternatives that travel partially underground. Specific suggestions include underground installation from 259th St. and 212th Ave. thru and beyond 281st St. and 212th Ave., from the bottom of the hill to the top of the hill.
- Alternatives along the bed of the Columbia River.

- Alternatives that comprise the shortest route, including suggestions for a route just west of route Segment 9 and east of I-5 through La Center, and a route due east of the PacifiCorp lines in Chelatchie.
- Alternatives that travel through Oregon. Specific suggestions include routes along Highway 30, in Columbia County along the Columbia River, or along existing right-of-way between Allston and Keeler Substations.

SOCIAL AND ECONOMIC

- Alternatives that represent the least cost option and/or the least amount of public opposition.
- Alternatives that avoid adverse social and economic impacts, including impacts to property owners, businesses, and agricultural operations.

LAND USE

- Alternatives along existing rights-of-way and/or easements that BPA already owns.
    - Specific route segments mentioned include: 2, 9, 14, 15, 16, 17, 18, 25, 27, 29, 31, 36, 37, 38, 39, 41, 45, 48, 50, and 51.
    - Additional areas mentioned include existing or former rights-of-way associated with the Trojan Nuclear Power Plant, Reynolds Aluminum plant, Camas Mill, the Mint Farm, Fruit Valley, PacifiCorp, Pacific Power and Light, between Swift Powerhouse to Troutdale Substation, the power station in Buncombe Hollow, and between the following substations: Paul and Allston, Paul and Pearl, Allston and Keeler, Keeler and Ross, Allston and Pearl, and St. Johns and Vancouver Shipyards.
- Alternatives that use existing commercial and industrial lands, including along rail lines, and through industrial properties along the Columbia River in Oregon.
- Alternatives that avoid school district properties.
- Alternatives that avoid residential areas, are less populated, and use larger sized-parcels such as rural areas, forested areas, and public (state and federal) lands.
    - Commenters suggested using alternatives that comprise the easternmost route segments.
    - Specific route segments mentioned include 1, 2, 3, 7, 9, 11, 21, 26, 27, 28, 29, 30, 32, 33, 34, 35, 49, 51, and 52.
    - Commenters suggested minimizing impacts to the number of property owners by using lands with a minimum parcel size of 40 acres, use of timber company land owned by

Weyerhaeuser and Longview Fibre Company, real-estate investment trust lands, and use of lands owned by the Washington State Department of Natural Resources (Yacolt Burn State Forest).

  - Also suggested were new routes even farther east, including routes that follow the border of DNR land; areas beyond Larch Mountain, Silver Star Mountain, Lake Merwin and Green Mountain; and lands operated by the U.S. Forest Service (Gifford Pinchot National Forest) and Bureau of Land Management.

  - Commenters suggested that other route alternatives be developed to avoid populated residential areas, including Camp Bonneville, areas north of the Lexington Substation, just east of route Segment 9, along Mill Creek valley, and from the former Trans Alta Coal Mine site in the Hanaford Valley north of Centralia, running south east.

- Alternatives that coordinate with existing or planned highway infrastructure. Specific suggestions include Interstate-5, Interstate-84, Interstate-205, State Route 14, and co-locating at the site for a proposed interstate interchange and third highway bridge over the Columbia River to Troutdale.
- Alternatives for substations that are outside of neighborhood walking areas.
- Alternatives where there are existing paved roads, specifically Segment 25.
- Alternatives in areas that have been logged, specifically recently clear cut land in Ostrander.
- Alternatives that correlate with areas of expected growth, including a suggestion for a line that runs east-west between Brush Prairie and Ridgefield.
- Alternatives that avoid lands that have medium to high wind power potential.
- Alternatives that avoid sites with communication infrastructure, including Davis Peak.

NATURAL RESOURCES

- Alternatives that avoid streams, riparian areas and wetlands, and other environmentally sensitive areas, and that avoid fragmentation of wildlife habitat. Specific suggestions for avoiding resource impacts include segments 7, 11, 29, 34, and 35, as well as routes near Yale Dam, or from Larch Mountain Correctional Center toward Jones Creek Recreational Area. Specific route segments and areas of concern are referenced within the section “Resources.”
- Alternatives that result in a zero loss in carbon emission balance.
- Alternatives that provide natural breaks from wildfire, including sites near the Yacolt Burn Area, specifically segments 11, 21, 29, 30, 33, 34, 35, and 39.

SOCIO-ECONOMICS

GENERAL SOCIO-ECONOMIC COMMENTS

Commenters said that the draft EIS should discuss the social and economic consequences of proposed transmission line construction, including the effects of the proposed facilities and alternatives on community facilities, programs, systems, and community infrastructure.

COST TO LANDOWNERS

Commenters identified a variety of concerns related to costs to landowners. Some said a transmission line sited on or near their property would lower their property values due to aesthetic, noise, environmental, and perceived health effects. Others sited potential increases in liability, vandalism, or theft due to increased access to property via roads and cleared rights-of-way.

Commenters discussed costs associated with the ability to sell property and homes with a transmission line on or near properties. Commenters noted that they purchased properties during a higher real estate market and have already experienced property value losses due to the economic downturn. Others were concerned that stumpage prices on timber lands are currently low and timber assessed at pre-commercial value would provide low returns on investment.

> *"The higher voltage lines will be at a higher height and will be substantially more visible to the proximate neighborhoods, which will impact resale values in what were previously desirable neighborhoods to home buyers."*

Furthermore, commenters said there has been an immediate effect on property values with the announcement of the project's potential route segments and associated costs for those who plan to sell their property before final decisions are made. Commenters said the disclosure requirements for real estate transactions will impact property values until route segments are dropped from the analysis and/or a final route siting decision is made.

Commenters asked for studies to assess project costs to account for economic impacts to properties directly abutting proposed routes, as well as "indirect" costs associated with other properties that could experience property devaluation from nearby transmission lines. Comments discussed the proposed project's taller 150-foot towers and potential noise increases from a 500-kV line as sources of impacts that could affect property values.

Commenters said that lowered property values could impact personal and family financial status. Commenters said that their homes are their primary source of savings and that financial losses from lowered property values would have long-term consequences, including bankruptcy, going "upside down" on mortgages, and losses to retirement and education savings. Commenters said that retirees on fixed incomes and the disabled have fewer means of making-up for financial losses.

Similarly, commenters noted that even if their property was not purchased by BPA, they may still desire to move away from the transmission line, causing them to incur moving and home sale costs.

In addition to impacts to property values, commenters said that outbuildings and decks will need to be relocated or retrofitted for safety concerns, such as upgrading metal buildings and grounding structures. Commenters mentioned that the existing restrictions on their property combined with the addition of the transmission line easement would leave them with no buildable land. Others commented that transmission line siting could displace planned development that has significant investments already made, including the Hockinson School District's land purchases intended for facility expansion.

Furthermore, commenters noted that the project poses potential costs due to damage to trees or structures from project construction activities.

Commenters recommended that BPA calculate the impact of constructing the proposed new lines on "…the transmission costs of both Network and Point-to-Point Transmission contracts, and thus on ratepayers in the region."

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 discussed the impacts of the project on the local, regional, and state economies. Comments included concerns about decreased tourism to local areas, including Battle Ground Lake and Lucia Falls, impacts to fast-growing areas, and both negative and positive effects of specific siting options on farming, timber, and other resource-based economies.

> *"[T]he project will soon negatively affect the economy of this area as well. This is a huge burden for a county already economically depressed. People will be reluctant to build, improve, buy and sell in all the areas affected by the plans."*

Comments also addressed the current state of the economy and housing markets. Commenters said the current state of the economy and housing markets should delay the project and they questioned whether BPA was purposefully timing the project in a down economy to reduce project costs. Commenters stated that a transmission line will reduce property values in its vicinity and compound poor local economic conditions. Additionally, commenters said that uncertainty in project decisions will also delay investment in individual properties and also slow construction activity in the area.

Commenters said that the cost of the project will be significant, especially if sited through residential areas where properties are of higher value, and if all route segments are surveyed. Commenters asked that the project consider a design that is low-cost to minimize risks to taxpayers and ratepayers. Comments also addressed the volatility of energy markets and potential changes in energy demand that could affect project financing.

INCOME, BUSINESS OPERATIONS, AND EMPLOYMENT

Commenters identified a variety of income, business operations, and employment issues. Commenters said that home-based businesses would be impacted by a transmission line. Other income-related issues identified by commenters included that the proposal will discourage renters from leasing rental properties, and that businesses providing home improvement services to homes and properties near the transmission line will suffer because no one will want to improve these properties.

Commenters said a transmission line sited on a portion of their property would impact the use of their entire property, especially in cases where their land is used to generate income through farming, timber, or other business activities. Others noted that those who rely on subsistence use of lands, especially for food, could be affected by a transmission line sited on their property. Commenters said that timber operations should be compensated for any trees cut down at their mature harvest value.

Commenters said that construction of transmission lines on sites with potential for wind or other renewable energy development could prevent them from generating revenue from these lands.

Commenters identified areas that are targeted for economic development investments to create employment growth, including the Lacamas Northshore area. Commenters requested BPA identify the number of jobs that will be created or preserved as a result of the construction and operation of the transmission line.

TAXES

Impacts to tax revenues, payment and assessment were also noted by commenters. As for tax revenues, commenters noted that the project would reduce the amount of home construction and depress property values, thereby reducing tax revenues available to the local government, schools, fire districts, libraries, infrastructure, and other critical services.

Commenters said that some proposed route segments go through areas with high property values, which would have a proportionate effect on tax revenues. Others said that a route alternative that uses state timber lands would likely impact the tax base less than alternatives that use private property because of the collective amount of taxes paid by landowners as compared to timber royalties.

> *"This project will dramatically shrink the tax revenue from areas with the highest property values in the county and will compromise Clark County's ability to fund schools and infrastructure for the rest of the county."*

Commenters had questions about how the project would change the amount of taxes they paid, as well as the potential changes in taxes due to changing timber and agricultural land uses. Commenters were concerned about the payment of back-taxes that are deferred while lands are in productive timber or agricultural use. Also discussed was the potential impact removal of state timber lands from production would have on revenues reserved for school construction.

Comments included concerns about paying taxes on land that owners would not be able to use and said that assessed home values should decrease if transmission towers are sited on a landowner's property. Additionally, commenters requested that BPA work with tax authorities to acknowledge that easements cannot be used.

Commenters discussed the relationship between property views, assessed value of property, and taxes. Additional discussion of this topic can be found under the section titled "Aesthetics."

SCHOOLS AND EDUCATION OPPORTUNITIES

Commenters identified schools within the route segments that could be affected or displaced by transmission line siting. In particular, commenters discussed development plans of the Hockinson School District, which has purchased property for school expansion within the area of Segment 31.

Commenters said that Covington Middle School, Harmony Elementary, Beaver Hill School, Camas High School, and Pleasant Valley Elementary and Middle Schools were near existing transmission lines. Commenters discussed their concerns about the health risks to children if transmission lines were sited near school facilities.

Additionally, commenters said their property was used for educational purposes, including environmental education classes from Evergreen School District that release salmon and conduct water quality studies.

Commenters said that removing DNR lands from timber production and sales could impact state revenues designated for funding school construction.

HOUSING

Commenters expressed concerns about renters and manufactured home park dwellers and how they could be displaced from their residences if a transmission line were sited on these properties. Commenters asked how renters of homes or land would be compensated in these instances.

Commenters said that a transmission line could require the condemnation of their homes. Further discussion of this issue is included under the sections "Costs to Landowners" and "Land Use, Eminent Domain, and Compensation."

DEMOGRAPHICS

Commenters discussed the impacts on elderly and retired populations, specifically how many are on fixed incomes and have reduced ability to handle the financial burden of moving and "starting over."

In addition, commenters said that potential displacement of landowners would disproportionately affect low-income and unemployed populations.

QUALITY OF LIFE ISSUES

Commenters discussed the impacts to their quality of life and quality of community from a transmission line on or near their property. Commenters said that a transmission line would ruin the character of their communities and the reasons they had chosen to live in particular areas, including both rural areas and neighborhoods.

Commenters said that a transmission line would devalue their property and community investments in schools, and decrease the livability of their neighborhoods.

> *"Decreasing our quality of life and our property values will decrease the socio-economic environment of our neighborhood. Your economic analysis should include the cost to society of degrading an idyllic, rural residential area with true historical value, including the increased cost of public services."*

Commenters said that a transmission line would affect the connectivity of their neighborhoods or communities. Specifically, commenters said that Segment 31 would "bisect" their neighborhood into those who were "above the line" and those who were "below the line." Commenters also said that the displacement of homes and families would have an impact on the community's ability to assist one another, including in times of illness or injury.

Comments included concerns that a transmission line would have an emotional impact on families. Commenters said their children were established in local schools and that they would not want to move them. Commenters also discussed their family histories on a property or in an area, and the potential losses of memories, experiences, or the ability to pass a property on to family members.

Additionally, commenters discussed impacts from the displacement of facilities and businesses that serve the community, specifically, Fern Prairie Market.

Commenters also discussed potential interference from electric and magnetic fields on communications and other equipment. Additional discussion of electric and magnetic field interference can be found in the section, "Health and Safety."

HEALTH AND SAFETY

GENERAL HEALTH AND SAFETY COMMENTS

Commenters expressed their concerns about potential impacts to the health and safety of people, pets, and livestock.

Commenters expressed their concerns about the health effects of living near transmission lines. Health conditions mentioned included leukemia, brain cancer, lymph node cancer, Lou Gehrig's disease,

miscarriage, damage to DNA, Alzheimer's, ALS, birth defects, and other chronic disorders. Commenters were especially concerned about the risks to small children.

Commenters discussed their concerns about transmission lines near their homes contributing to more severe symptoms of existing medical conditions, including seizures. Commenters also noted that the placement of transmission lines near residential areas increases stress levels, impacting physical and mental health.

Also mentioned were those who rely on medical equipment in their homes and how they cannot be without power during any portion of transmission line construction. Commenters noted the potential for electronic interference with medical devices, such as implanted cardiac pacemakers or insulin pumps and glucose sensors. Comments questioned how those with pacemakers or experimental heart monitoring equipment that visited areas with transmission lines would recognize this risk.

Commenters discussed the uncertainty of studies and information regarding the potential health risks of high voltage transmission lines. Commenters said that many studies were funded by power companies and oftentimes had "inconclusive" results. Others said that several independent studies show a significant risk of childhood leukemia, adult cancers, and risks to pregnancy. Commenters also said that studies to-date had used only up to 230-kV lines and were not applicable to more powerful 500-kV lines.

In addition to the transmission lines, commenters said that project activities could expose the public to previously contaminated soils, potentially exposing the public to hazards through contact with the soil, water, or air.

ELECTRIC AND MAGNETIC FIELD EFFECTS

GENERAL ELECTRIC AND MAGNETIC FIELD EFFECTS COMMENTS

Commenters had many questions and concerns regarding electric and magnetic fields (EMF). Commenters wanted to know who regulated EMF and specific limits. Comments included requests that BPA study the potential effects of EMF from a potential 500-kV transmission line, as well as EMF radiation at various distances from a 500-kV line. Commenters requested that studies be used to establish the minimum safe distances from the lines based on risks to human health.

HEALTH EFFECTS

Similar to the previously mentioned general health effects, commenters expressed their concerns about health effects from radiation, especially concerning children. These included specific health effects such as cancers, especially childhood leukemia and breast cancer; diseases such as Lou Gehrig's disease; effects on the immune system; effects on the cardiovascular system; effects on field perception; neurobehavioral effects; lymphoproliferative

> *"My children will be exposed to high levels of electromagnetic energy. Studies conclude (California DHS, 2002) that exposure will increase their risk of leukemia, brain cancer, and other future health problems."*

and myleoproliferative disorders; miscarriage and birth defects; Alzheimer's disease; sleep disturbances; and effects on existing medical conditions, including metal implants. Some commenters noted that they are sensitive to EMF.

Comments also addressed the health effects of cumulative exposure to EMF from other sources, including appliances, machinery, and other transmission lines. Commenters expressed concerns about the placement of lines near homes and schools, as well as driving or walking under transmission lines. Comments cited several studies that discuss the risks of EMF exposure and suggested specific minimum safe distances. Commenters also discussed the state of science on EMF and the lack of consensus from studies that address potential health effects and risks. Comments suggested that the burden of proof regarding health risks should fall to BPA.

Commenters also addressed concerns about the effects of EMF on plants and animals, especially sensitive wildlife species such as frogs and fish. Commenters were also concerned about domestic animals and livestock, particularly about the long-term genetic impacts to livestock.

ELECTRONIC AND MAGNETIC INTERFERENCE

Commenters expressed concerns with potential interference from EMF with electronics and equipment. Technologies cited include telephones, cellular phones, computers, wireless internet, television (including satellite and cable television), hearing aids, and AM/FM radio. Comments included the proportionate impact on rural areas, which oftentimes have existing degraded signals, as well as potential interference with emergency communications. Others were concerned about interference impacting home businesses, and mitigation for such interference was recommended.

> *"We want to know the effect of the power line on radio, broadcast TV and satellite TV and internet connections, what kind of effect? How broad an area around the power line? What can be done to mitigate these effects, and who pays to fix any problems?"*

Comments also addressed potential interference with airplanes that could lead to accidents. Commenters also identified concerns about effects to well water and surface water from EMF.

TRANSMISSION LINE DESIGN

Commenters identified a variety of transmission line design EMF-related issues. Commenters questioned the protectiveness of a 150-foot right-of-way design from the potential effects of EMF for a 500-kV transmission line, compared to a 300-foot easement for a 230-kV transmission line. In addition, some comments cite studies and/or policies that make statements regarding minimum safe distances for buildings relative to large transmission lines.

Additionally, commenters living near existing transmission lines expressed concerns about increased EMF from increased line power. Commenters asked BPA to study the potential for a double-circuit 230-kV line design to reduce EMF at the edge of the ROW through cancellation of EMF fields.

Comments also discussed the differences in EMF radiation from specific designs, including burying transmission lines and the use of alternating current (AC) versus direct current (DC).

EMF AND COMMUNITY SAFETY

Commenters addressed other potential community safety concerns from EMF, especially fire risk and risks of shock. Commenters also questioned whether EMF would affect fencing, as well as "electro corrosion" of underground metal buildings.

COMMUNITY SAFETY

Commenters identified a variety of community safety issues.

Physical safety issues included:

- Risk of electrical shock. Commenters were concerned about children and livestock around the towers and with general safe practices under the right-of way. Commenters discussed the need to ground buildings, fences, and cars to minimize risk of electric shock and the burden this places on landowners.
- Concerns about induced voltage to vehicles on dry pavement or rock. Commenters questioned whether they would have to mitigate this risk, and whether there would be associated compensation.
- Lightning strikes. Commenters were concerned about the potential for lightening strikes to towers that could cause harm to people and/or livestock.
- Earthquakes and other natural disasters. Commenters said that seismic activity could cause lines and/or towers to fall.

Commenters identified a variety of design-related community safety issues including:

- The project area is seismically active and the towers should be placed away from people in case the towers were to fall over in an earthquake.
- Increased risks of fire and explosions due to technical failures of transmission equipment.
- Risk of exposure to transformers.
- Severe weather, including wind, snow, and ice could cause structural failures in the transmission lines and the lines should not be sited in areas with severe weather patterns. Commenters identified high wind microclimates in areas east of Battle Ground Lake, the hills east and north east of 212th/266th near Battle Ground, west of Larch Mountain, a ridge south of Moulton, south of the East Fork of the Lewis River, parts of Vancouver near the Columbia River Gorge, along Segments 29 and 31, and at high elevations.

- Fire safety issues related to location. Some commenters said that transmission towers sited in burn areas would not be safe, especially the Yacolt Burn area and Dole Valley, where fuels have been accumulating and risk of fire is high. Others said that BPA could use the transmission right-of-way as a fire break and protect community safety and property, as well as provide for the safety of wildlife in the event of a wildfire.

- Clearing vegetation from the transmission right-of-way leading to landslides or flooding, endangering nearby land and homes.

Additionally, commenters expressed concerns about public safety, which included:

- The transmission lines becoming the target of terrorist attacks and the resulting impact on public safety.

- The transmission line location interfering with air strips used for emergency response and medical air lifts.

- The transmission line location interfering with firefighting helicopter water pick-up from reservoir ponds near Segment 29 and the Yacolt Burn area.

NOISE

Commenters expressed their concerns about increased noise levels from transmission lines, including potential effects on children, livestock, and wildlife. Specifically, comments addressed sounds from the lines, including "humming," "buzzing," "cracking," and "popping," especially during wet weather. Commenters that live near existing transmission lines expressed concerns about increased noise levels from increased line voltage.

Also mentioned was the potential for noise to carry farther when the source is at a higher elevation.

> *"Clearly audible noise is emitted from 500 KV power lines. This noise increases on wet days and decreases with distance from the lines, but it will be a disturbing background noise for residents living in our currently quiet, rural setting."*

Cumulative impacts of noise were also a concern. Commenters stated concerns about the cumulative impact of noise on their properties, especially from freeways or other transmission lines in the area, and the potential for noise levels to increase if trees buffering existing noise were removed from a transmission right-of-way. Commenters expressed concerns that the noise from the additional transmission lines, plus traffic noise, "will exceed existing federal guidelines."

Commenters also asked about noise monitoring during construction and once a transmission line was in-place, the specific noise levels that would be permitted, and the specific response, mitigation, or compensation BPA would make for exceeding these noise levels. Comments included a recommendation that BPA commit to no noise heard from the outside of homes adjacent to the transmission lines.

Additionally, commenters were concerned about the potential for noise impacts due to construction and monitoring activities. Comments included asking BPA to provide notification of construction activities and times of day when noise would be likely.

AESTHETICS

Comments identified visual and scenic resources that could be impacted by transmission lines and towers. Resources mentioned in comments included views of area mountains, valleys, ridges, and skylines, as well as sunsets and other natural features. Comments also addressed light pollution from tower beacons.

Comments addressed the aesthetics of the transmission towers themselves, and the visual impact of looking at the towers and/or lines and the lights on the towers. Commenters also discussed the visual impact on larger areas, especially siting towers in valleys or ridges in the project area that could be seen from longer distances and have the potential to visually impact rural landscape character. Commenters also were concerned about the visual impact to forested and natural areas from a potential transmission tower sited on forest lands.

Commenters living near existing transmission towers commented on the increased visual impact from taller towers or the placement of additional towers in their vicinity.

> *"The new towers will be 30 feet taller than the existing 75-80 foot towers. This means that the new towers will be high above existing screening trees and also will be much more visible from neighboring residences. In addition, the taller towers will impact the current lovely sweeping view from many hillside houses."*

Commenters stated that removing trees for the easement would decrease their privacy, affect neighborhood character, and increase the visibility of the transmission lines from their property.

Commenters discussed impacts to property values due to visual impacts of a transmission line. In some instances, property values are assessed at a higher value based on views from the property. Because of this, property taxes would also be affected by changes to assessed property value. Commenters also discussed their concerns about impacts on property values and the ability to sell homes if a transmission tower could be seen from their property.

In addition to visual impacts on property, commenters also commented on the visual impact to highways and areas designated as "scenic drives," including North Clark County Scenic Drive; scenic routes; and scenic rivers or falls, including Lucia Falls.

CUMULATIVE IMPACTS

Commenters identified a variety of potential cumulative impacts. Commenters said they live near existing transmission lines and that the project will have cumulative impacts, including additional visual and noise impacts and health risks. Commenters noted that additional transmission lines may impact their property values.

Commenters said that their properties were already subject to other acts of eminent domain by local government, such as easements on properties made for roadway rights-of-way. In addition, commenters noted that BPA has already taken trees from their property and the removal of additional trees could impact the ecology of the area, as well as property values. Others said there are currently natural gas pipelines on their property and they do not want a transmission line.

Commenters provided guidance to assess the adequacy of the cumulative impacts assessment, including suggestions to evaluate whether the project's actions have cumulative effects on specific resources or geographic areas by looking at past, present, and future actions that have or could affect these resources or areas.

> *"Adding a second tower along existing I-5 corridor ROW concentrates 730kV in one area."*

LAND USE

EXISTING AND PLANNED LAND USES

Commenters discussed areas of existing land uses within the notification area. Land uses identified included:

- Areas currently and historically used for farming and livestock, including organic certified operations, and for growing and harvesting timber; areas with current residential developments, including subdivisions, rural homes, and vacation and retirement homes.
- Areas with commercial developments, including land currently leased for billboards.
- Schools and daycare facilities.
- Correctional facilities.
- Recreational land uses.
- Watershed areas that may have significant natural resource values for hydrologic function, water quality, and fish and wildlife habitat.

- Silviculture research areas.
- Pipelines.

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

- Current and proposed zoning designations.
- Recently annexed areas, including the Green Mountain annexation area.
- Areas slated for commercial/light industrial economic development, such as the Lacamas Northshore area in Camas.
- Housing developments.
- Recreational developments.

"…segment 9. This route is a particularly poor choice for the new 500-volt transmission line, whether the new line is built in the same area as the existing power line or is built alongside it, because it will affect the maximum number of residences due to the high density of city development in Vancouver, Kelso, and Lexington."

Also identified were several existing conservation land use designations on properties within the notification area, including open space zoning, conservation easements, conservation covenants, green belts, animal reserves, and other areas that are protected or where development is limited due to existing natural resource value.

Commenters also identified planned developments at various stages of implementation, including recently-built homes and subdivisions. Commenters also identified areas that have experienced growth or are good candidates for additional growth, particularly with respect to residential development. Commenters with existing building permits were concerned that permits may expire before they can make decisions based on project outcomes. Others were concerned with the ability to gain permits for building under or near transmission lines.

Commenters expressed concerns about the proximity of transmission lines to homes and buildings and impacts to them. Commenters questioned how the transmission lines would preclude specific activities. Others expressed concern that the transmission line could impact their home gardens and orchards.

Additionally, commenters also questioned the compatibility of 500-kV transmission lines and residential neighborhoods. Comments also noted that rural zoned property has specific land use requirements to protect rural land from incompatible uses.

Commenters said the draft EIS should characterize land uses along potential transmission line corridors and identify potential conflicts, including land use, urban design, historic and cultural resources, and reuse and conservation potential. Comments recommended that BPA discuss the anticipated growth that the I-5 Project will provide for, both in terms of existing needs, as well as new service requests. Commenters said the draft EIS should determine the potential impact of this future development, particularly on natural resources.

In addition, comments noted that the draft EIS should describe possible conflicts with the objectives of federal, regional, state, local, and Tribal land use plans, policies and controls for the area concerned. PacifiCorp asked that BPA coordinate with the company and FERC on any alternatives involving portions of or crossing their project lands.

TRANSPORTATION

Many transportation issues were raised. Commenters identified private and public aviation facilities within the notification area, including the Green Mountain Airport, Fern Prairie Airport, Grove Field, and Walter Sutton's Private Strip Airport, and questioned the potential interference with air traffic from transmission towers and lines.

Commenters identified roads that provide access to areas that may be impacted by the transmission lines, including SR-503, 212th Ave. and Kristen Circle, as well as a potential road extension conflict where 18th Street may be extended east to 243rd from 192nd. Commenters also asked about the project's potential impacts to parking facilities, including at the Port of Camas.

Commenters identified existing heavy rail lines that could be impacted by the transmission lines, including the Chelatchie Railroad.

Commenters identified existing road maintenance responsibilities. Commenters also discussed existing issues with roads including flooding associated with Dusty Drive Road and the McGeary Road Bridge, and questioned whether BPA would make road improvements.

Also identified within the notification area were instances where school transit activities, such as bus stops, may be affected by a transmission line. Others identified a railroad located in an easement, as well as a timber farm's easement for road use.

Additionally, commenters noted that some of the roads on the maps were incorrectly identified and that BPA may not have rights to the roads they are using now.

Commenters said the draft EIS should identify impacts to planned and potential highway corridors and maximize any benefits from collaborative designs.

> *"Will BPA upgrade, improve and maintain the Delameter road for access to the large substation area with such things as a traffic light at the intersection of West Side Hwy and Delameter and other roads that will experience increased travel by maintenance workers?"*

RECREATION

Commenters said that recreational areas could be impacted by a transmission line, including fishing and swimming sites, hiking and equestrian trails, soccer fields, and bicycle paths. Commenters said that the visual and health impacts of a transmission line could discourage use of existing recreational areas. Identified recreation areas that could be impacted by a transmission lines include the following:

- Existing recreational areas and trails, including the East Fork of Lewis River; Silver Star Mountain; Cold Creek trailhead; areas around Ariel and Cougar, Washington; Speeliyia Bay Recreational Area; Souixon and Canyon Creeks; Yacolt Burn area; Tarbell Trail system; Saddle Dam campground and boat launch; and the north side of Tum Tum Mountain. Also discussed were planned trail systems at Chinook Mountain and 4-Corners.
- Existing parks and trails, including Lucia Falls Park, the Ellen Davis Trail, the Washougal River Greenway, and a private wetland preserve and trail system for the Stoney Meadows Homeowners Association.
- Planned soccer and baseball fields. Specifically, the plans of Highland Little League and Clark County Parks and Recreation.
- Camping areas, such as the Lake Merwin Campers Hideaway and Rock Creek Campground.
- A shooting range at the Wolverton Mountain Gun Club near the transmission lines.
- Outdoor recreational vehicle trails, such as the Jones Creek Trail.
- Route segments with recreation areas present or planned, including segments: 11, 20, 28, 29, 27, 30, 31, 32, 40, 41, 44, 45, 46, 50, and 52.

Commenters suggested that a new transmission line be used to enhance recreation opportunities. Commenters encouraged BPA to coordinate with other government agencies to provide these opportunities. Commenters suggested the development of multi-use, non-motorized trails to horses, bicycles, rollerbladers, and foot traffic. Commenters also suggested that stewardship by organized outdoor recreational groups could provide recreational opportunities, enhance security, and discourage vandalism on transmission line rights-of-way.

> *"[W]e recognize that utility corridors can offer an opportunity to provide linear, trail-based recreation opportunities. We encourage the Administration to consider compatible trail use such as walking, cycling, and equestrian use within any corridors secured for the transmission lines."*

Commenters both encouraged and expressed concerns about the use of transmission line rights-of-way by all-terrain vehicles.

Additionally, commenters said that a route farther east through public timber lands would not impact recreation, as people recreate farther east in National Forest land, not state timber lands.

MINING

Commenters identified areas used for mining and gravel operations. Several gravel pit operations have been used to supply gravel for building logging roads. Restrictions on explosives used to break up rock in these areas could affect these operations.

EMINENT DOMAIN AND COMPENSATION

Commenters discussed the potential condemnation of private property, easements made for transmission line rights-of-way, and associated compensation for use of land they own. Commenters also identified properties that are directly adjacent to existing rights-of-way.

Commenters discussed the hardship of property and home condemnation, citing their general desire not to move, plans to retire in a specific home or property, recent development of their property or home renovation, preference for their current neighborhood and neighbors, and personal and family history at a specific location. Comments also discussed the inappropriateness of eminent domain when profits could accrue to private utilities selling additional power, as well as a "betrayal of trust" between homeowners, Pacific Power and Light, and Clark County regarding condemning land and building towers outside of the existing easement.

> *"Please have your environmental studies look at routes that don't involve the confiscation of private property."*

Commenters also expressed their concerns about the process by which BPA would assess the value of and compensate landowners for easements on or purchase of their properties. Commenters said that compensation at "fair market value" in a down real-estate market will impact the investments made in their properties and not allow them to procure a similar property or maintain a similar standard of living. Commenters said that BPA's proposals are influencing property values and therefore BPA should compensate landowners based on historic values before the project was announced.

Additionally, commenters said that BPA's negotiated compensations for condemnation will not include property with easement rights, therefore lowering overall compensation. Some commenters stated a preference for full condemnation versus partial condemnation of their properties.

Commenters said that transmission corridors placed on conservation easements would impact the ability of these lands to achieve their mitigation purposes and require compensation.

Comments included requests for compensation that would allow affected individuals to relocate to comparable properties in the area. Commenters discussed the difficultly in relocating households in their same areas, due to the availability of built homes or developable property. Commenters discussed additional costs that may not be accounted for in assessed values, including custom built homes, the costs associated with dividing property, costs associated with temporary housing, and the cost to replicate necessary ADA-accessible facilities at a new location.

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 their habitat, including upland habitats such as forests, meadows, and prairies; riparian habitats; and aquatic in-stream habitat and species. In addition to the specific resource concerns outlined below, commenters also discussed the scenic value of forested and natural areas.

GENERAL WILDLIFE/HABITAT COMMENTS

Commenters also included a recommendation for wildlife surveys to include habitats and migratory patterns for both native and non-native species for "no less than two complete migratory cycles," and to include a separate review of those surveys to assess the impact of the proposed routes on each species.

Commenters asked about impacts to wildlife related to cleared right-of-way and construction. In addition, commenters asked BPA to consider the effect of EMF on animal health.

- *Route segments*: 10, 11, 12, 13, 15, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 43, 44, and 46.
- *Other areas*: Washougal River system including the Little Washougal River, Coweeman River, Lewis River, East Fork of Lewis River, Chelatchie Creek, Rock Creek, Lucia Falls Park, Clark Creek, Leckler Creek, Shanghai Creek, Rose Valley, Lacamas Creek, Fifth Plain Creek, Morgan Creek, Salmon Creek, Yacolt Creek, east of Ammeter Road, City of Camas watershed, Labonde Creek, King Creek, Rainbow Falls, Big Tree Creek, Kennedy Creek, Brook's Creek, Grasshopper Creek, Schmidt Creek, Yacolt Creek, Gifford Pinchot National Forest, Yacolt National Forest, and the Yacolt Burn Area.

NATIVE WILDLIFE/HABITAT (UPLAND)

Commenters said that wildlife and their habitat could be impacted by a transmission line and that their migration, nesting, and feeding areas should be protected. Also noted was the potential for transmission right-of-way clearing and substation footprints to impact and disconnect existing natural areas.

> *"In our neighborhood, we value the existing habitat for numerous deer, coyote, bobcat, red tailed hawks, owl, turkey vultures, pheasant, black bear, and yes, even the silly rabbits."*

Commenters discussed the limited nature of habitat areas and pressures on species, especially large mammals that move over bigger areas in a seasonal migration pattern and to listed and sensitive species (see additional discussion, in "Threatened, Endangered, and Sensitive Species").

Commenters expressed concern about the project's impacts to investments in habitat improvement projects. These projects included a PacifiCorp improvement project completed in summer/fall 2009 to satisfy relicensing requirements, as well as recent restoration projects undertaken by the State of Washington on the Little Washougal River.

Commenters identified multiple species and their 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 include the following:

AMPHIBIANS AND REPTILES

- *Species*: frogs; toads; salamanders; including the Larch Mountain Salamander and Albino Salamander; newts; snakes; and turtles, including the Northwest Red Turtle and Western Pond Turtle.
- *Route segments*: 29, 30, 31, and 40.

BIRDS

Commenters asked BPA to assess the collision risk transmission line infrastructure poses to birds through field surveys and to modify problem structures. Commenters noted that shield wires are often struck by birds in flight and efforts should be made to include design and mitigation measures to reduce potential impacts to birds. Commenters suggested that lower elevation route alternatives may also lead to fewer migratory bird collisions with transmission infrastructure. Additionally, commenters expressed concern about a bird sanctuary located near Ross Substation.

- *Species:* Waterfowl, including geese, Canada Geese, and Wood Duck, Mallard, Merganser. Birds of prey, including owls, Great Horned Owl, osprey, Red Tail Hawk, American Kestral, Golden Eagle, Bald Eagle, Water Eagle, screech owl, and White-Spotted Owl. Other birds, including Wild Turkey, Blue Heron, finches, grouse, hummingbirds, White Breasted Nuthatch, woodpecker, Western Tanager, Band-tailed Pigeon, Mourning Dove, jays (including Steller's jay), Chinese Pheasant, and Turkey Vultures, Piliated Woodpecker, and Slender-billed Nuthatch.
- *Route segments*: 11, 15, 25, 27, 28, 29, 30, 31, 37, 38, and 40.
- *Other areas*: East Fork of the Lewis River, Laenanus Creek, pond that flows into Lacamas Creek, west of Camp Bonneville.

SMALL MAMMALS

- *Species*: Bats, porcupines, opossum, flying squirrel, Western Gray Squirrel, red squirrel, skunk, rodents, weasel, river otter, muskrat, raccoon, rabbits, Mountain Beaver, marmot, fox, and moles.
- *Route segments*: 15, 27, 31, 35, 37, and 38.

- *Other areas*: west of Camp Bonneville.

LARGE MAMMALS

- *Species*: bear, deer, elk, cougar, wolf, coyote, bobcat, and lynx.
- *Route segments*: 15, 31, 35, 37, and 38.
- *Other areas*: west of Camp Bonneville.

INSECTS

- *Species*: Honeybees, dragonflies, rare butterflies.
- *Route segment*: 31.

RIPARIAN AND AQUATIC WILDLIFE/HABITAT

Commenters said that riparian and aquatic habitat and species are potentially impacted by transmission line siting. Commenters identified multiple species and their habitats on or adjacent to their properties including:

- *Species*: Salmon (including Chinook and Coho), steelhead, trout (including Bull Trout), fingerlings, crawdads, and bass.
- *Route segments*: 11, 15, 28, 30, and 31.
- *Other areas*: Lacamas Creek, Shanghai Creek, Fifth Plain Creek, Morgan Creek, Rock Creek, Salmon Creek, Yacolt Creek, Washougal River system, including the Little Washougal River; Coweeman River; Lewis River (including the East Fork); Chelatchie Creek; Lucia Falls; Delemeter Creek; Monahan Creek; and Speylei Bay on Lake Merwin.

Commenters also identified areas designated as shoreline streams subject to the Washington Shoreline Management Act, those within Rural Conservation Areas, areas that were included in specific species recovery plans, and areas that were used for fisheries and hatchery operations. Additionally, commenters identified listed and sensitive aquatic species, which are discussed under the section, "Endangered, Threatened, and Sensitive Species."

Commenters expressed concerns about project impacts on surface water quality, specifically, the potential for increased erosion from construction activities that could carry into streams, as well as stormwater runoff from cleared rights-of-way. Also discussed was the effect of removal of trees on stream temperature. Commenters stated a need to assess the relative impact of locating a transmission line in headwaters versus more urbanized areas in lower watersheds. Additional discussion of water contamination issues are addressed in the section, "Health and Safety."

Commenters reminded BPA of the obligation to address several matters related to fisheries in the draft EIS, including identification of streams with fisheries issues and values and areas that could be impacted by transmission line construction activities, particularly roads. Comments also discussed research that suggests electric and magnetic fields may interfere with the migration instincts of fish.

WETLANDS

Commenters discussed areas of wetlands used by wildlife for habitat and the role that wetlands play in ecosystem function. Commenters identified specific existing or potential wetlands areas owned by homeowner associations, on or adjacent to their properties, associated with specific route segments, associated with specific basins or other natural drainages, and in other general areas.

Comments identified specific wetlands that have been documented through inventories of local, state, or federal agencies, as well as specific designations, such as a Natural Area Preserve. Information on specific wetlands includes experience through real estate transactions, attempts to develop properties, or through specific planning processes. Specific wetland areas mentioned include:

> *"Much of the area has numerous wetlands with building restrictions that would certainly be an environmental issue you would have to face."*

- *Route segments*: 3, 11, 25, 26, 27, 28 31, 36, 37, 39, 40, and 50.
- *Other areas*: Lacamas Northshore, Shanghai Creek, Chelatchie Creek, Laenanus Creek, Stony Meadows Development, Lacamas Creek, Edmonds Estates, and Rock Creek.

Commenters expressed their concerns for the protection of wetlands that could be impacted by a transmission line. Commenters questioned whether towers could be located in wetland areas. Some commenters questioned whether BPA would build in wetlands and has authority to impact wetlands.

Commenters discussed specific legal requirements for the consideration of impacts to wetlands. Commenters suggested identifying wetlands in the study area and assessing the potential impacts of project alternatives and recommended the establishment of wetland and riparian habitat buffer zones to avoid adverse impacts.

FLOODPLAINS

Commenters identified specific floodplains, floodways, or floodway fringe within the project area. These areas include floodplains associated with individual properties, specific rivers or creeks that flood, and specific route segments. Commenters included specific details about timing of flood events and whether areas are designated as within the 100-year floodplain. Specific areas of floodplain activity mentioned include:

- *Route segments*: 3, 25, 27, 31, 36, 40, and 41.
- *Other areas*: Rock Creek, Salmon Creek, Arkansas Creek, Dusty Drive Road, and McGeary Road Bridge.

Commenters questioned the desirability of locating a project within a floodplain, as well as the potential for adverse effects to floodplains. Commenters said the draft EIS should map all floodplain areas, follow general standards for placing utilities in these areas, and avoid placement in the Channel Migration Zone of rivers and streams to avoid potential damage to transmission infrastructure.

SURFACE AND GROUND WATER RESOURCES

A variety of surface and ground water concerns were identified by commenters. Comments included identification of sources of surface and ground water including: rivers, streams (both year-round and intermittent), tributaries, lakes, ponds, and springs that are on or adjacent to their properties. They also included water bodies designated as a "Federal Navigable Waterway" or "registered spring." Specific surface and ground water resources include the following areas:

- Arkansas Creek, Big Tree Creek, Brook's Creek, Cedar Creek, Chelatchie Creek, Clark Creek, Cold Creek, Columbia River, Coweeman River, Cowlitz River, Dorothy Lake, Fifth Plain Creek, Goble Creek, Grasshopper Creek, Kalama River, Kennedy Creek, King Creek, Labonde Creek, Lacamas Creek, Lacamas Lake, Leckler Creek, Lewis River, East and North Forks of Lewis River, Little Washougal River, Lucia Falls, Mill Creek, Morgan Creek, Ostrander Creek, Rainbow Falls, Riley Creek, Rock Creek, Rose Valley, Salmon Creek, Schmidt Creek, Shanghai Creek, Small Creek, Speelyai Creek, Washougal River, and Yacolt Creek.

Commenters discussed surface water rights they hold, including rights held to creek water flowing through a property used for private fishery operations and livestock. Additionally, commenters said that tree removal for access road and line construction could damage watershed resources and local drinking water sources. Trees and other vegetation help slow the flow of surface water and allow absorption to aquifers.

Commenters discussed concerns about potential drinking water contamination from proposed transmission line construction and operation. Specific concerns included contamination from polychlorinated biphenyl (PCBs) or oils that may be used in small amounts in transformers, heavy metals, herbicides, or other contaminants that may be used on-site. Commenters also identified high levels of naturally occurring arsenic in local soils and suggested that construction activities could introduce this heavy metal into the environment, contaminating surface and ground water.

Commenters identified wells used for drinking water and agricultural uses on their properties where municipal water supplies are not available. Comments included mention of currently degraded water quality conditions, specifically from salt, and concerns that construction of towers could further impact these water sources. Comments also cited concerns about the potential for project activities to cause wells to cave in.

In addition to water wells, commenters also identified septic tanks and drain fields on their properties. Some expressed concerns about the potential impact on system capacities due to alteration of water drainage from transmission line construction, as well as potential reduction in space for drain fields.

Comments discussed the potential for clearing of vegetation to increase stormwater run-off and infiltration, altering surface and ground water flows.

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

NATIVE VEGETATION

Commenters discussed the benefits of native vegetation for habitat, controlling erosion and cooling streams, as well as acting as noise, visual, and privacy buffers in developed areas. Commenters said the removal of native vegetation could create impacts on watershed and stream health, increase flooding and landslides, and remove existing property buffers on developed properties. Additionally, commenters also stated that removing large numbers of trees could leave the remaining stands more susceptible to tree fall during windstorms.

Commenters identified stands of old growth and older trees, valley fringe forests, and the presence of snags used as wildlife habitat within the project notification area. Specific species and habitats of concern include the following:

- *Species*: a variety of fir, cedar, and alder species; Willamette White Prairie Oak; Pacific Yew; native plants Cimicifuga elata (tall bugbane), Corydalis aquae-gelidae, Water Howellia, Salal, Red huckleberry, ferns, and mosses; and wildflowers including Trillium, Bradshaw's lomatium, and Red Columbine.
- *Route segments*: 9, 28, and 31
- *Other areas*: Dole Valley, Lacamas Creek, and Salmon Creek/Rock Creek watershed.

NON-NATIVE VEGETATION

Commenters expressed concerns about the proliferation of non-native or invasive species, particularly in cleared rights-of-way for a transmission line, for their impacts to native plant and wildlife species, as well as their nuisance to adjacent landowners. Species and specific areas mentioned include:

- *Species*: Himalayan Blackberry, Scotch Broom, and Japanese Knotweed.
- *Route segment*: 31

Commenters expressed concern that BPA may use powerful herbicides to control these non-native species and the potential effects of these chemicals on human and animal health, the water supply, and their persistence in the environment.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES

Commenters identified listed or sensitive species observed or believed to be within the project area including:

- *Species*: Chinook Salmon, Coho Salmon, steelhead, Piliated woodpecker, Spotted Owl, Bald Eagle, Slender-billed Nuthatch and Western Pond Turtle. Plants included Trillium, Bradshaw's lomatium and Oregon White Oak trees.
- *Route segments*: 10, 11, 28, 30, and 31.
- *Other areas*: Rock Creek, Washougal River system, including the Little Washougal River; Coweeman River, Lewis River, Chelatchie Creek, Lucia Falls, Delemeter Creek, and Monahan Creek.

Commenters reminded BPA of its obligation to identify the presence of any threatened and endangered species or species of special concern and assess impacts to threatened, endangered, or sensitive species. In addition, impacts should also be assessed for both aquatic and terrestrial habitats that are conservation priorities or population strongholds for a listed or sensitive species.

> *"…[A]n evaluation of opportunities to avoid listed species and sensitive habitats by way of micrositing and other measures."*

AIR QUALITY AND CLIMATE

Commenters discussed the need to understand the impact of project activities on carbon emissions, specifically the carbon sequestration impacts associated with tree removal.

Commenters identified specific areas of high winds, heavy precipitation, and potential snow loading that could impact a transmission line. Specific areas of concern for strong weather patterns include the following:

- *Route segments*: 29, 30, 31, and 39
- *Other areas:* Ridge south of Moulton, West of Larch Mountain, north east of 212th/266th, and east of Battle Ground Lake

Commenters also discussed the need for the project to identify the project's contributions to increased air pollution such as particulate matter and dust, as well as potential climate change impacts.

CULTURAL AND HISTORIC RESOURCES

Commenters recommended avoiding areas with significant cultural or historic significance. Comments identified specific resources within the project area including cemeteries, grave sites, archaeological resources, fossils, historic buildings, tribal cultural resources, "historic drives," historic trees, railroad facilities, and areas or properties with other community or family history. Comments mentioned

resources on the National Register of Historic Places, specifically the Leadbetter House. Areas of concern mentioned include the following:

- *Route segments:* 27, 29, and 31
- *Other areas*: Delameter Valley, Chelatchie Prairie, Coweeman River, Rose Valley, Green Mountain, near Hockinson High School, Hein Kuiper House, Pomeroy Farm, Parker Landing Park, Dole Valley, along 256th Ave, Ross-Lexington Line at I-5, Lelooska Cultural Center, Morgan Creek, and Crawford Valley.

Commenters reminded BPA to consult with Native American tribes that may have interests in project sites due to current or historic use regarding project plans and provided suggestions for such coordination. In addition, commenters said BPA is obligated to coordinate with State Historic Preservation Officers regarding potential cultural and historic resources, as well as other government agencies such as the National Park Service, Washington State Parks, county museums, historical societies and cultural heritage associations.

GEOLOGY AND SOILS

Commenters discussed the suitability of specific areas due to geologic and soil conditions. In general, commenters recommended avoiding areas that are unstable, or have high erosion or landslide potential. Comments identified areas with steep topography that may preclude siting a transmission line. Commenters identified concerns about erosion and landslides, particularly in areas with steep grades, in combination with clearance of stabilizing vegetation and the use of heavy construction equipment.

Comments identified areas classified as “unstable soils.” Other areas that commenters felt may not be suitable for siting a transmission line include land that is “boggy,” “marshy,” or “muddy.” Commenters noted that soils with significant groundwater flows could be subject to frost heave and effect transmission towers.

Additionally, commenters cited the potential for the impacts of seismic or volcanic events on transmission infrastructure. Commenters specifically mentioned the Lacamas Lake Fault, which runs from Hockinson, through Lacamas Lake and to the Columbia River; a cinder cone near Segment 27; and identified liquefaction hazard areas.

Commenters discussed the potential for construction activities and vegetation removal to contribute to soil erosion and landslides. Commenters identified areas with potential soil contamination that could pose a threat to human and animal health if disturbed, including the former Colson Rendering property. Additionally, commenters said that there are elevated levels of naturally occurring arsenic in some soils

> *“While each residence's situation is unique, many of those that border the existing power line are on steep land or hillsides. In fact some of the land is classified as "unstable soils" on the Kelso "Critical Areas" map. This kind of terrain is prone to mud slides, as is shown by the recent slide on Corduroy Road, near where it intersects Sunrise Street, only a quarter mile from the current power lines. New, heavier power-line towers, or their construction, may cause even more slides.”*

in Clark County. Further discussion of this topic relative to water contamination can be found in the section "Surface and Ground Water Resources."

Commenters said that the draft EIS should include a discussion of relevant project area geology, topography, soils and stream stability in terms of erosion and mass failure potential and assess risk to water quality, aquatic habitat, and other natural resources.

ENVIRONMENTAL JUSTICE

Commenters reminded BPA of the obligation of federal agencies to identify and address disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority and low-income populations. Commenters recommended that BPA develop a strategy for effective public involvement of minority and low income populations and incorporate environmental, social, economic, and cultural considerations for these populations into the transmission line studies and in developing mitigation measures.

NEXT STEPS

BPA staff and contractors will continue to collect more information about the route segments and substation sites. Between now and summer 2010, BPA may drop, modify and, possibly, add other segments. After BPA identifies all segments, the segments will be developed into alternatives. All alternatives will be evaluated and compared in the draft EIS. The draft EIS is slated for completion in early 2011. BPA will publicly circulate the draft EIS and take additional comments. After responding to the comments received on the draft EIS, BPA will prepare a final EIS. The agency expects to decide whether to build the line in 2012. At that time, if the decision is to build, a final route would be identified.

APPENDIX A – NOTICE OF INTENT

6450-01-U

DEPARTMENT OF ENERGY

Bonneville Power Administration

I-5 Corridor Reinforcement Project

AGENCY: Bonneville Power Administration (BPA), Department of Energy (DOE).

ACTION: Notice of intent (NOI) to prepare an Environmental Impact Statement (EIS) and notice of floodplain and wetlands involvement.

SUMMARY: BPA intends to prepare an EIS in accordance with the National Environmental Policy Act (NEPA) on the construction, operation, and maintenance of a proposed 500-kilovolt (kV) transmission line and associated substations. The project would be located in Cowlitz and Clark counties, Washington, and Multnomah County, Oregon. The new BPA transmission line would extend generally southeast from a new substation proposed near Castle Rock in Cowlitz County, Washington (referred to as Castle Rock Substation), to a new substation proposed near BPA's existing Troutdale Substation near the city of Troutdale in Multnomah County, Oregon. Multiple preliminary transmission line route segments have been identified that, when combined, result in various transmission line routing alternatives approximately 70 miles long. The proposed transmission line and substations are needed to help ease transmission system congestion in the southwest Washington and northwest Oregon area, allowing BPA to fulfill existing and new transmission service requests for existing and new generation; improve system reliability; and meet continued electric load growth.

With this NOI, BPA is initiating the public scoping process for the EIS. BPA is requesting comments about potential environmental impacts that it should consider as it

prepares the EIS for the proposed project, as well as comments on preliminary transmission line route segments and the proposed substations that have been identified.

In accordance with DOE regulations for compliance with floodplain and wetlands environmental review requirements, BPA will prepare a floodplain and wetlands assessment to avoid or minimize potential harm to or within any affected floodplains and wetlands. The assessment will be included in the EIS.

DATES: Oral and written scoping comments are due to BPA no later than November 23, 2009. Comments may also be made at the EIS scoping meetings to be held between October 27 and November 7, 2009 at the addresses below.

ADDRESSES: Send letters with comments on the proposed scope of the EIS to I-5 Corridor Reinforcement Project, PO Box 9250, Portland, OR, 97207, or by fax to (888) 315-4503. You may also call BPA's comment and information line at (800) 230-6593 and leave a comment, or submit comments online at *www.bpa.gov/go/i5*. BPA will post all comments on BPA's Web site at *www.bpa.gov/i5*. Submit requests to be placed on the project mailing list, for information, and questions to the same address and numbers above.

On Tuesday, October 27, 2009, an open-house style scoping meeting will be held from 4:00 p.m. to 7:00 p.m. at Amboy Middle School, 22115 NE Chelatchie Road, Amboy, Washington 98601. On Wednesday, October 28, 2009, a scoping meeting will be held from 4:00 p.m. to 7:00 p.m. at Clark College, Gaiser Student Hall, 1933 Fort Vancouver Way, Vancouver, Washington 98663. On Thursday, October 29, 2009, a scoping meeting will be held from 4:00 p.m. to 7:00 p.m. at Mark Morris High School, 1602 Mark Morris Court, Longview, Washington 98632. On Tuesday,

November 3, 2009, a scoping meeting will be held from 4:00 p.m. to 7:00 p.m. at Liberty Middle School, 1612 NE Garfield Street, Camas, Washington 98607. On Thursday, November 5, 2009, a scoping meeting will be held from 4:00 p.m. to 7:00 p.m. at Gresham Holiday Inn, 2752 NE Hogan Drive, Gresham, Oregon 97030. On Saturday, November 7, 2009, a scoping meeting will be held from 1:00 p.m. to 4:00 p.m. at Hazel Dell Grange, 7509 NE Hazel Dell Avenue, Vancouver, Washington 98665. The Hazel Dell Grange is not wheelchair accessible.

At these informal meetings we will provide maps and other information about the project and have members of the project team available to answer questions and accept oral and written comments. You may stop by any time during these open houses.

FOR FURTHER INFORMATION CONTACT: Nancy Wittpenn, Environmental Project Lead, Bonneville Power Administration – KEC-4, P.O. Box 3621, Portland, Oregon 97208-3621; toll-free telephone 1-800-282-3713; direct telephone 503-230-3297; or e-mail *nawittpenn@bpa.gov*. You may also contact Mark Korsness, Project Manager, Bonneville Power Administration – TNP-3, PO Box 3621, Portland, Oregon, 97208-3621; toll-free telephone 1-800-282-3713; direct telephone 360-619-6326; or e-mail *makorsness@bpa.gov*. Additional information can be found at BPA's Web site: *www.bpa.gov/go/i5*.

SUPPLEMENTARY INFORMATION: Southwest Washington and northwest Oregon, including Vancouver, Longview, Portland, and surrounding suburban cities and towns, have a high concentration of industrial, commercial and residential electric load. The power plants that serve this area include hydroelectric dams; gas, coal and nuclear plants;

and more recently, wind farms. These power facilities use the electrical transmission system to get the power they produce to the people and industries that use it.

The transmission system in this area has become increasingly congested and is approaching its capacity as power production, particularly from wind, and electrical use have increased. In addition, BPA continues to receive requests for more transmission service. BPA's annual Network Open Season process allows utilities, power generators, and other power marketers to make long-term transmission service requests on BPA's transmission system. Existing and new requests received through BPA's 2008 Network Open Season process further increases the likelihood that the transmission system will exceed its capacity. BPA must respond to these requests for transmission service under its Open Access Transmission Tariff. This tariff, which is generally consistent with the Federal Energy Regulatory Commission's *pro forma* open access tariff, has procedures that provide access to BPA's transmission system for all eligible customers, consistent with all BPA requirements (including the availability or development of sufficient transmission capacity) and subject to an environmental review under NEPA. If an additional line is not built, continued congestion will jeopardize transmission system reliability and, possibly, lead to power interruptions or blackouts in the area.

The proposed I-5 Corridor Reinforcement Project would help respond to these existing and new requests for transmission service, help accommodate load growth, and address reliability concerns. BPA, therefore, will prepare an EIS under NEPA to assist the agency as it decides whether to build the proposed project, and if a decision is made to build a line, which transmission line alternative should be constructed.

BPA will be the lead agency for preparation of the EIS. In furtherance of existing cooperative agreements between BPA and the States of Washington and Oregon, the Washington Energy Facility Site Evaluation Council (Washington EFSEC) and the Oregon Energy Facility Siting Council (Oregon EFSC) will be cooperating agencies in the NEPA process. Among other things, these state agencies will assist BPA in evaluating transmission line alternatives, identifying state interests that should be addressed in the EIS, and participating in preparation of the EIS. Additional cooperating agencies for the EIS may be identified as the proposed project proceeds through the NEPA process.

Preliminary Route Segments for Developing Alternatives. BPA's proposed 500-kV transmission line would extend from a new substation near Castle Rock, Washington, to a new substation near Troutdale, Oregon. BPA has identified many preliminary transmission line route segments that can be combined in various ways to form different potential routes for the proposed transmission line. All potential transmission line routes generally extend southeast from Castle Rock through Cowlitz County, Washington, and then generally south through Clark County, Washington, to a proposed crossing of the Columbia River near the city of Camas, Washington. Just south of this river crossing, all potential line routes would end at the proposed new substation directly north of the city of Troutdale in Oregon.

The route segments vary in length and are composed of either existing or new rights-of-way, or parallel existing rights-of-way. Route segments cross privately and publicly owned urban and rural lands. Depending on the combination of these route

segments, potential routes for the proposed transmission line vary in length but are approximately 70 miles long.

While many preliminary route segments have already been identified, other route segments may be identified and existing route segments may be modified or eliminated as a result of the scoping process. BPA will use comments received during the scoping period, continuing discussions with various interested parties, and further transmission line design work to develop route segments into transmission line alternatives to be studied in the draft EIS. BPA will also consider the No Action Alternative, that is, not building the transmission line and substations, in the draft EIS.

Public Participation and Identification of Environmental Issues. The potential environmental issues identified for most transmission line projects involve land use, recreation, transportation and aviation, socioeconomics, cultural resources, visual resources, public health and safety, noise, electric and magnetic field effects, sensitive plants and animals and their habitats, soil erosion, wetlands, floodplains, and fish and water resources. BPA will conduct a 45-day scoping period during which tribes; affected landowners; concerned citizens; special interest groups; local, state, and federal governments; and any other interested parties are invited to comment on the scope of the EIS, including the route segments under consideration and the environmental impacts to be evaluated. Scoping will help BPA add, modify, or eliminate route segments and ultimately help BPA develop transmission line alternatives to be studied in the EIS. Scoping will also ensure that a full range of issues related to this proposal is addressed in the EIS, and also will identify significant or potentially significant impacts that may result from the proposed project. When completed, the draft EIS will be circulated for

review and comment, and BPA will hold public meetings to answer questions and receive comments. BPA will consider and respond to comments received on the draft EIS in the final EIS. The final EIS is expected to be published in spring 2012. BPA's decision will be documented in a Record of Decision that will follow the final EIS.

Issued in Portland, Oregon, on October 2, 2009.

*/s/Stephen J. Wright*_____
Stephen J. Wright
Administrator and
Chief Executive Officer

APPENDIX B – SCOPING NOTIFICATION PACKAGE

The notification packet included a letter announcing the project and scoping period, a project fact sheet, project map, comment form, and return envelope. The return envelope is not included in this appendix.

Department of Energy

Bonneville Power Administration
P.O. Box 491
Vancouver, Washington 98666-0491

TRANSMISSION SERVICES

October 9, 2009

In reply refer to: TEP-TPP-3

To: Parties Interested in the I-5 Corridor Reinforcement Project

The Bonneville Power Administration (BPA) is proposing to build a new transmission line and associated substations that could affect you. This letter briefly explains what is being proposed, outlines our environmental review process and schedule, and invites you to meetings where you can learn more and comment on the proposal.

Proposal - BPA is proposing to construct a 500-kilovolt transmission line and associated substations. The new transmission line would extend generally north to south from a new substation near Castle Rock, Cowlitz County, Washington (referred to as Castle Rock Substation), to a new substation near BPA's Troutdale Substation, Troutdale, Multnomah County, Oregon (see enclosed map). The proposed transmission line and substations are needed to help ease transmission system congestion in the northwest Oregon and southwest Washington area, allowing BPA to fulfill existing and new transmission service requests for existing and new generation; improve system reliability; and meet continued electric load growth.

To understand the potential impacts of the proposed project, BPA will prepare an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA). See NEPA enclosure for more details. During this process, we will be working with landowners, Tribes, the Washington and Oregon energy facility siting councils, as well as with other federal, state and local agencies, and interest groups.

BPA has identified many preliminary transmission line route segments that can be combined in various ways to form different potential routes for the proposed transmission line. These route segments vary in length and are composed of existing and new rights-of-way or parallel existing rights-of-way. While many preliminary route segments have already been identified, other route segments may be identified and existing route segments may be modified or eliminated as a result of the scoping process. BPA will use comments received during the scoping period, continuing discussions with various interested parties, and further transmission line design work to develop route segments into transmission line alternatives to be studied in the draft EIS. BPA will consider the impacts of these transmission line alternatives and also the No Action Alternative, that is, not building the transmission line and substations, in the draft EIS.

Public Meetings - We will soon start to assess the potential environmental impacts of the proposed project and we would like to hear from you. What questions do you have? What resources should we analyze? Do you have comments on the preliminary transmission line route segments and locations for the new substations? We have scheduled the following six public scoping meetings to hear your ideas and accept comments related to the scope of the EIS that will be prepared.

Tuesday, Oct. 27, 2009
4 p.m. to 7 p.m.
Amboy Middle School
22115 NE Chelatchie Road
Amboy, WA 98601

Wednesday, Oct. 28, 2009
4 p.m. to 7 p.m.
Clark College
Gaiser Student Hall
1933 Fort Vancouver Way
Vancouver, WA 98663

Thursday, Oct. 29, 2009
4 p.m. to 7 p.m.
Mark Morris High School
1602 Mark Morris Court
Longview, WA 98632

Tuesday, Nov. 3, 2009
4 p.m. to 7 p.m.
Liberty Middle School
1612 NE Garfield Street
Camas, WA 98607

Thursday, Nov. 5, 2009
4 p.m. to 7 p.m.
Gresham Holiday Inn
2752 NE Hogan Drive
Gresham, OR 97030

Saturday, Nov. 7, 2009
1 p.m. to 4 p.m.
Hazel Dell Grange **(No Wheelchair Access)**
7509 NE Hazel Dell Avenue
Vancouver, WA 98665

We do not plan to give a formal presentation at the meetings, so come anytime between 4 and 7 p.m. We will have maps and other information available about the project and several members of the project team will be available to answer your questions, listen to your ideas, and accept your comments.

Other Ways to Comment - If you cannot come to one of the meetings, you can still comment. Please submit comments to us by **November 23, 2009**. Comments on the proposed scope of the EIS can be made online at *www.bpa.gov/go/i5*. You can also use the enclosed comment form and return envelope to make comments. Send separate letters with comments to I-5 Corridor Reinforcement Project, PO Box 9250, Portland, OR, 97207, or by fax to (888) 315-4503. You may also call and leave a comment on BPA's comment and information line at (800) 230-6593. BPA will post all comments on BPA's Web site at *www.bpa.gov/go/i5*.

Process and Schedule - Starting this winter you may see BPA staff or contractors in the area as they work to refine possible routes and conduct environmental surveys. If we need to enter property where we do not have existing access, we will contact property owners for permission through a separate mailing in the next two weeks.

The information we gather in our environmental studies will be published in a draft EIS that will be available for review and comment in late 2010 or early 2011. The environmental review process will take approximately two and a half years, with a decision on whether and how to proceed with the project expected by spring 2012.

For More Information - To find out more information about this project, please go to BPA's Web site at *www.bpa.gov/go/i5* or refer to the enclosed fact sheet for details. You may also call BPA's comment and information line at (800) 230-6593 and leave a question or message. Your question or message will be forwarded to the appropriate team member who will get back to you quickly.

Thank you for your interest in this project.

Sincerely,

/s/ Mark Korsness, 10/9/09

Mark Korsness
Project Manager

Enclosure(s):
Project Map
NEPA Brochure
Comment Form
Return Envelope
Fact Sheet

FactSheet

September 2009

I-5 Corridor Reinforcement Project

Providing safe, reliable energy for the future

The July 2009 heat wave brought unusual attention to the region's electric power system. Daily media alerts in the Portland/Vancouver metropolitan area questioned whether the power system could generate and deliver sufficient power to keep air conditioning units running, and whether the system could hold up under stresses caused by the heat and demand for power.

The transmission system successfully met all the challenges the heat threw at it, as it did last winter when snow and freezing temperatures gripped the region for days.

Growing population and energy uses such as air conditioning drive increasing electricity demand in the Portland/Vancouver area and throughout the Northwest, even with an aggressive regional energy conservation program. As the demand for electricity increases, BPA's transmission system will continue to be tested.

As part of its effort to keep pace with increasing demands, BPA is proposing to build the I-5 Corridor Reinforcement Project, a new 500-kilovolt transmission line that would run between Castle Rock, Wash., and Troutdale, Ore.

Why is the I-5 Corridor Reinforcement Project needed?

The proposed project would strengthen BPA's transmission grid and allow it to meet future electricity demands safely and reliably.

The transmission system in southwest Washington and northwest Oregon is heavily used and is approaching its capacity as power production and electricity use increase. More and more electricity is needed for the high concentration of industrial, commercial and residential electrical use in Portland, Vancouver, Longview and surrounding suburban cities and towns. The power plants that serve this area include hydroelectric dams; gas, coal and nuclear plants; and, more recently, wind farms. These power generation facilities use the transmission system to get the power they produce to the people and industries that use it.

BPA continues to receive requests for more transmission service. Each year, utilities, power generators and power marketers make requests for long-term transmission service on BPA's transmission system. These requests further increase the likelihood that the transmission system will soon exceed its capacity. BPA has taken all available steps to reduce congestion on the system short of major infrastructure additions, but the problem continues to intensify.

If an additional line is not built, these pressures pose serious reliability concerns and possibly could lead to

power blackouts in the area. This conclusion is supported by other regional utilities that have also experienced increasing demands on their systems.

Reinforcing the transmission system along the I-5 corridor also would provide the transmission flexibility required to bring more highly desirable renewable wind power from the east to the population centers along I-5.

How does BPA propose to reinforce the system?

BPA planning engineers have determined that adding a 500-kV transmission line would help meet the region's growing need for electricity. The proposed transmission line would be about 70 miles long and extend from a new substation near Castle Rock, Wash., to a new substation near BPA's existing Troutdale Substation.

BPA has not identified a preferred route or made a decision to build a line. Engineers have identified a number of route segments (see map on opposite page) between the proposed new substations. The segments vary in length and include both existing and new rights-of-way. Some segments run parallel to existing rights-of-way. Route segments cross urban and rural, private and public land. Any number of identified route segments can be combined to form a reasonable transmission line alternative. There may be other segments that meet the technical requirements of the system that we haven't looked at yet. If there are, we want to hear about them.

What are the next steps?

BPA will prepare an environmental impact statement for the proposed project. The first step is seeking comments on the scope of the EIS to help identify potentially significant impacts and issues that may result from the proposed project. Information and comments from all interested and potentially affected parties, including landowners, citizens, tribes, government agencies and interest groups, will help us identify potential environmental impacts.

The potential environmental issues identified for most transmission line projects include land use, cultural resources, aesthetics, public health and safety, sensitive plants and animals, soil erosion, wetlands, floodplains, fish, wildlife and water resources.

Once the scoping period ends, the agency will use the comments received during the scoping period, discussions with interested parties and additional surveys and studies of the route segments to develop reasonable transmission line alternatives and to begin work on the draft EIS.

This draft EIS will describe the transmission line alternatives developed and identify potential impacts and mitigation to reduce impacts. The draft EIS also will

Fall 2009
BPA announces proposed project and solicits public input on scope of EIS

2010
BPA conducts field work and environmental analyses, prepares draft environmental impact statement

Spring 2011
BPA issues draft environmental impact statement for public review and comment

Spring 2012
BPA issues final environmental impact statement

Spring 2012
BPA announces agency decision

describe the impacts of not building the transmission line. When complete, BPA will release the draft EIS for public review and comment, and will hold public meetings. BPA will respond to comments on the draft EIS in the final EIS.

After BPA reviews all the information in the final EIS, it will make a decision about the project, which will be explained in a record of decision.

How can I get involved?

There are several ways to be informed and to get involved in the I-5 Corridor Reinforcement Project:

Get on the mailing list

If you received this in the mail, you are on our mailing list. If you would like to be added to the list, please visit the project Web site at *www.bpa.gov/go/i5* and view the "Get Involved" link. You also can call us toll free at (800) 230-6593 and leave your name, address and other contact information so we can add you to the list.

Go online

Visit the project Web site at *www.bpa.gov/go/i5*. The Web site has a wealth of information about the project. The Web site will be updated throughout the public and environmental review.

Submit comments on the project

You may submit comments, suggestions or requests to BPA in a number of ways. Online at *www.bpa.gov/go/i5*. By mail at BPA I-5 Corridor Reinforcement, PO Box 9250, Portland OR 97207. Toll free at (800) 230-6593. By fax at (888) 315-4503.

BPA is accepting public scoping comments through Nov. 23, 2009. BPA posts all comments on its Web site. Comments received by voice mail at the toll-free number will be transcribed and posted on the Web site.

Attend the open house scoping meetings

At these informal meetings, BPA will provide maps and other information about the project and have members of the project team available to answer questions and accept oral and written comments. Interested parties may stop by any time during the open house to share ideas and comments.

Open house scoping meetings

Tuesday, Oct. 27, 2009
4 p.m. to 7 p.m.
Amboy Middle School
22115 NE Chelatchie Road
Amboy, WA 98601

Wednesday, Oct. 28, 2009
4 p.m. to 7 p.m.
Gaiser Student Hall at Clark College
1933 Fort Vancouver Way
Vancouver, WA 98663

Thursday, Oct. 29, 2009
4 p.m. to 7 p.m.
Mark Morris High School
1602 Mark Morris Court
Longview, WA 98632

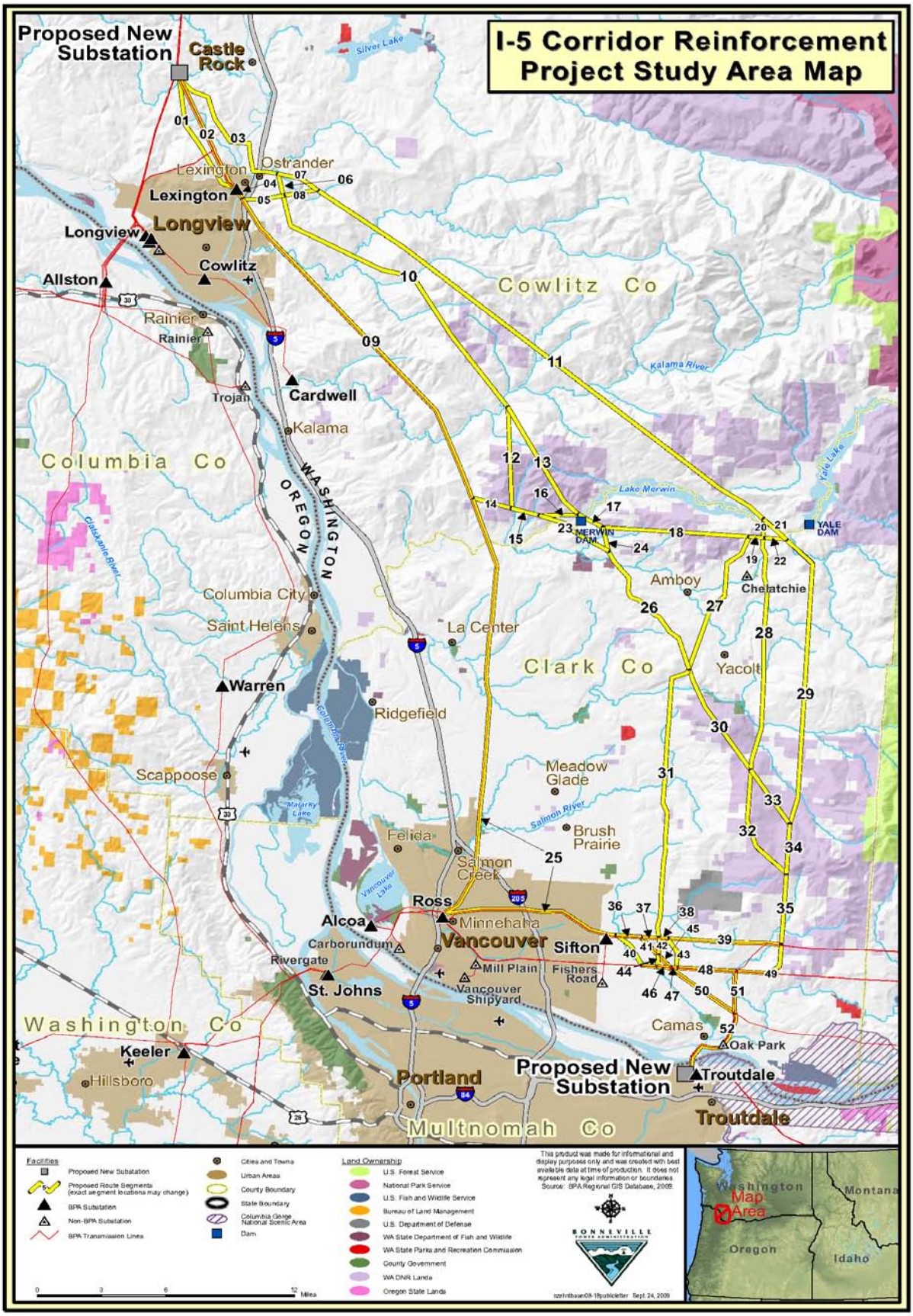
Tuesday, Nov. 3, 2009
4 p.m. to 7 p.m.
Liberty Middle School
1612 NE Garfield Street
Camas, WA 98607

Thursday, Nov. 5, 2009
4 p.m. to 7 p.m.
Gresham Holiday Inn
2752 NE Hogan Drive
Gresham, OR 97030

Saturday, Nov. 7, 2009
1 p.m. to 4 p.m.
Hazel Dell Grange
7509 NE Hazel Dell Avenue
Vancouver, WA 98665
No wheelchair access at this meeting

For Americans with Disabilities Act accommodations, please call toll free (800) 622-4519.

BPA
I-5 Corridor Reinforcement Project


I-5 Corridor Reinforcement
Project Study Area Map
Proposed New Substation
Castle Rock
Silver Lake
Lexington
Ostrander
Longview
Cowlitz
Allston
Rainier
Trojan
Cardwell
Kalama
Cowlitz Co
Columbia Co
Kalama River
Lake Merwin
Yale Lake
MERWIN DAM
YALE DAM
Chelatchie
Amboy
Columbia City
Saint Helens
La Center
Clark Co
Yacolt
Warren
Ridgefield
Scappoose
Meadow Glade
Salmon River
Brush Prairie
Felida
Salmon Creek
Vancouver Lake
Ross
Alcoa
Minnehaha
Vancouver
Sifton
Carborundum
Rivergate
Mill Plain
Fishers Road
St. Johns
Vancouver Shipyard
Washington Co
Keeler
Hillsboro
Portland
Camas
Oak Park
Proposed New Substation
Troutdale
Multnomah Co
OREGON
WASHINGTON
Columbia River
Clackamas River
Malarky Lake
Facilities
Proposed New Substation
Proposed Route Segments (exact segment location may change)
BPA Substation
Non-BPA Substation
BPA Transmission Lines
Cities and Towns
Urban Areas
County Boundary
State Boundary
Columbia Gorge National Scenic Area
Dam
Land Ownership
U.S. Forest Service
National Park Service
U.S. Fish and Wildlife Service
Bureau of Land Management
U.S. Department of Defense
WA State Department of Fish and Wildlife
WA State Parks and Recreation Commission
County Government
WA DNR Lands
Oregon State Lands
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Source: BPA Regional GIS Database, 2009.
BONNEVILLE POWER ADMINISTRATION
Miles
Washington
Map Area
Montana
Oregon
Idaho

BONNEVILLE POWER ADMINISTRATION

Proposed I-5 Corridor Reinforcement Project

"I'd like to tell you . . ."

Please have your environmental studies look at:

I have these other comments:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Place in enclosed return envelope or fax to BPA at (888) 315-4503 by November 23, 2009.

APPENDIX C – COMMUNICATIONS RECEIVED

All communications received are available on the I-5 Project Web site: http://www.bpa.gov/corporate/i-5-eis/documents/I-5_ScopingSummary_AppendixC.pdf.

If you do not have access to the Internet and would like to receive a CD or hard copy of this appendix (over 1,200 pages), please call our toll free document request line at 800-622-4520 and leave a message with your name and address, and ask for "I-5 Project Scoping Summary, Appendix C." Please specify CD or hard copy.

APPENDIX D – CODING CATEGORIES

The following comment categories were used to code individual comments contained within each scoping communication. 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
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Segment 51
Segment 52
Lexington Substation
Castle Rock Substation
Ross Substation
Sifton Substation
Troutdale Substation