

# Sammamish-Juanita 115 kV Project

## Meeting Summary

Advisory Group Meeting #1

September 29, 2011 • 5:30 p.m. to 8:00 p.m.

Baymont Inn and Suites, Kirkland, WA

Organization	Representative(s) in Attendance
Aegis Lodge	Wilson Anhar
Aerojet	Dirk Lakin
City of Kirkland, Parks and Community Services	Linda Murphy
City of Kirkland, Public Works	Rob Jammerman
City of Redmond, Planning	Eric McConaghy
City of Redmond, Parks	Jean Rice
Evergreen Hill Neighborhood	Lynda Haneman
Greater Redmond Chamber of Commerce	Danielle Lynch
Juanita Neighborhoods	Mary Pong Dunphy
Greater Kirkland Chamber of Commerce	Ron Parker
North Rose Hill Neighborhood	Don Schmitz
Puget Sound Energy	Andy Swayne
Sustainable Redmond	Kathe Low (alternate for Cindy Jayne)
Willows/Grass Lawn Neighborhood	Jill Krusinski
Willows Rose Hill Neighborhood	Tim McGruder (alternate for Tom Matthews)

## Other Attendees:

- Barry Lombard, Puget Sound Energy, Project Manager
- Gretchen Aliabadi, Puget Sound Energy, Corporate Communications
- Lindsey Walimaki, Puget Sound Energy, Corporate Communications
- Jim Swan, Puget Sound Energy, Senior Real Estate Representative
- Carol Jaeger, Puget Sound Energy, Transmission Planning
- LaWana Quayle, Puget Sound Energy, Transmission Engineering
- Kerry Kriner, Puget Sound Energy, Municipal Land Planner
- Angela Wingate, Puget Sound Energy, Municipal Liaison Manager
- Jason Van Nort, Puget Sound Energy, Government and Community Relations Manager
- Michael Wehling, Puget Sound Energy, Energy Efficiency
- Kathy Larson, Puget Sound Energy, Major Accounts
- Lyn Keenan, GeoEngineers
- Penny Mabie, EnviroIssues, EnviroIssues, Facilitator
- Rochelle Stowe, EnviroIssues, EnviroIssues, Notetaker

## Meeting Purpose and Overview

The first advisory group meeting for the Puget Sound Energy (PSE) Sammamish to Juanita 115 kilovolt (kV) Project was convened in Kirkland, Washington on September 29, 2011. The meeting included introductions of each of the advisory group members and other PSE staff in attendance, and a discussion of the advisory group's purpose, goals and ground rules. PSE presented an overview of the current electrical system in the northern Redmond-Kirkland area, regional electric challenges and solutions, and an overview of the Sammamish-Juanita 115 kV Project.

## Meeting Summary

### Meeting Agenda

Penny Mabie welcomed everyone, led a round of introductions, and reviewed the agenda.

### Advisory Group Expectations and Operating Guidelines

Penny walked the group through the proposed operating guidelines, including expectations, goals, purpose and norms for the advisory group. She noted that the role of each member would be to represent the interest of their community and explained that they would be partnering with PSE, using GeoEngineers' GeoRoute tool to develop the best route alternatives to help inform PSE's decision-making process. She made a note that the group would operate on a consensus-basis, to the extent possible. Penny requested that all advisory group members read through the proposed guidelines and provide feedback at the next meeting.

She checked with participants about preferred meeting times and the appropriateness of the venue. The group agreed the location and time of the meetings was good. After some discussion, the group agreed on October 17 for the second meeting, and subsequent meetings would be determined based on schedule needs.

### Electric System/Needs in Northern Redmond—Kirkland Area

Gretchen Aliabadi, PSE Corporate Communications, introduced herself and her role at PSE. Gretchen used a "Safety Moment" to remind the group about natural gas safety, following on the heels of a natural gas incident in North Seattle. She emphasized that anyone who smells gas should leave the area immediately, avoid turning on any light switch, and make a phone call outside or at a neighbor's house if necessary. Secondly, she urged attendees to call before digging for home or business projects. Underground utility lines such as water, telephone, cable and gas are all subject to damage by errant digging. The number to call before digging is: 811.

Gretchen provided an overview of Puget Sound Energy's electric system, and more specifically in the local Eastside region. She explained how power is generated from hundreds to thousands of miles away, and is transferred through an interconnected web of transmission and distribution lines, substations and

switching stations, and transformers. Each step in the transmission process transforms the power to lower voltages in order to reach homes and businesses.

She noted three concepts to remember when thinking about electricity:

- 1) Interconnection—the electric grid, a large web of power transfer that spans thousands of miles.
- 2) Redundancy— because outage-causing car-pole accidents, tree interference and equipment failures are inevitable, it is important to have different avenues for power to travel to keep the system running for customers 24/7.
- 3) Capacity— an energy “cushion” that allows for extra space to use redundancy.

Michael Wehling, PSE Energy Efficiency, introduced himself, his role, and experience at PSE. Michael explained how the demand for power is growing in the Eastside area through additional PSE customers, increase in use of electronics, and larger homes. Specifically in the northern Redmond-Kirkland area, PSE serves approximately 51,000 residential customer meters and 6,000 commercial customer meters. That translates to roughly 150,000 residential and 18,000 commercial customers relying on the power. He explained issues associated with the higher demand, and noted that PSE must prepare and adapt to meet these needs. PSE does this through using a number of tools to help meet these challenges, such as building, expanding or rebuilding existing infrastructure and integrating non-traditional solutions, such as energy efficiency programs, alternative energy and energy storage. In the northern Redmond-Kirkland area, PSE has determined, through a number of studies, that alternative solutions won’t provide enough capacity or reliability to address the region’s energy needs on its own, so the demand must be met with additional infrastructure.

Michael explained the purpose and need for the three local projects within the Moorlands electric system:

- **Cottage Brook-Moorlands Project** – PSE will rebuild the existing transmission line between the Cottage Brook and Moorlands substations to replace small gauge wire and aging poles with higher-capacity wire and new insulators and poles. This project is in the planning and permitting stage, and PSE anticipates construction will begin in 2012 and the project will be in-service by 2013.
- **Moorlands-Vitulli Project** – Similar to the Cottage Brook-Moorlands Project, PSE will rebuild the existing transmission line between the Moorlands and Vitulli substations. PSE anticipates working on planning and permitting in 2012-2013, beginning construction in 2013-2014, and having the project in-service by 2014.
- **Sammamish-Juanita-Moorlands Projects** – The existing Moorlands system serves 12 local substations and the load is higher than existing capacity. PSE plans on increasing capacity and improving reliability by building new transmission lines between the Sammamish, Juanita and Moorlands substations in two phases. Phase 1 is our current project – the Sammamish-Juanita 115 kV transmission line. Phase 2, likely years in the future, is the Juanita-Moorlands 115 kV transmission line.

### Questions: Electric System

*Is the Juanita Substation a switching substation?*

PSE explained that the Sammamish Substation is a switching substation; however Juanita Substation is for neighborhood distribution only.

*Why will two substations be removed from the Moorlands system?*

PSE explained that the existing system serves 12 local substations. By building the new Sammamish-Juanita segment, we can move two of those substations off of the Moorlands system thereby increasing available capacity within the system and improve system reliability by adding an additional transmission pathway to the Moorlands system.

*It looks as if the difference between the current capacity and the capacity with the Sammamish-Juanita segment is very large. Why is the differential so big?*

PSE is building capacity for the area for the next 30 years.

### An Overview of the Sammamish-Juanita 115 kV Transmission Line Project

Barry Lombard, PSE Project Manager, introduced himself, his role, and experience at PSE.

Barry provided an overview of the Sammamish-Juanita 115 kV Project, with a map of the study area, and images of what a typical 115 kV line might look like. He explained the approximate timeline for project.

Barry also explained that the project is not new, and PSE had previously hosted public meetings in 2008 and 2009 to gather feedback about some initial route alternatives. With this new public process and with the stakeholder advisory group, PSE is stepping back, using a new siting model to incorporate many siting criteria, including community values, and developing a new set of route alternatives. PSE's goal is to develop a preferred route that reflects community input and meets PSE's and the system's needs.

### Questions: Land Use/ Real Estate and Design

*How many miles is the project?*

Barry noted that the Sammamish-Juanita segment is approximately four miles in length. The distance is dependent upon the route selected.

*What are the options for undergrounding the lines?*

Carol Jaeger, PSE Transmission Planning, explained that undergrounding is rarely done at PSE. The last underground line PSE installed was in 1974. PSE looks at the possibility of burying cables, yet there are a number of issues. It is more difficult to obtain capacity because heat dissipation limits the amount the cables can be loaded, and the placement of underground transmission lines next to other underground utilities poses a limitation because of heat. There is a higher cost to dig, rather than to install overhead poles, and additional costs for restoration of trench and asphalt or landscaping; overhead lines could cost \$1 million per mile, while undergrounded lines may cost from \$4 million to \$10 million per mile. Due to this higher cost, the utility regulators who approve utility rates often require cost-sharing with

the local jurisdiction or private entities requesting undergrounding. Carol noted that undergrounded lines have fewer outages and less routine maintenance than overhead lines; however, the outages may last several weeks because typically a utility doesn't have adequately trained staff on hand to fix the technical problem immediately. PSE would likely hire technical experts from manufacturers of the transmission cables (who will be out of the area, perhaps overseas) to fix the problem, which may take from one to six weeks. So, while outages are less frequent, they are of longer duration.

*Will the project run into issues condemning private property to obtain easements? Will the line run on the existing right of ways?*

Barry explained that the line could run through private properties and/or public right of ways. He noted that the route depends on what the advisory group and community members recommend to PSE, and that PSE's preference is to negotiate with property owners. He noted that PSE does have the right to condemn, but that it is a last resort.

Jim Swan, PSE Real Estate Specialist, noted that if PSE must negotiate with property owners, it is on a case by case basis.

*Could officials in the permitting process decline the route alternative or advise PSE to modify the route?*  
Barry noted that is a possibility, but PSE will document their process, including the public process to develop the proposed route alignment when the permit officials ask how they reached a decision on a route.

*Have we passed the option of not building the Sammamish-Juanita line?*

Michael Wehling noted that from the presentation, PSE demonstrated the need for a new line in the area, so yes; the no-build option is not under consideration.

*Is the project already funded?*

Barry noted that the project is planned and funding targeted. PSE's project funds come from the PSE capital program. After the line is in service, the cost of the line is incorporated into the rate base and is spread over all rate payers.

*How much vegetation will have to be cleared for the project? Will the flowering trees on 132<sup>nd</sup> Street be affected?*

LaWana Qualye, PSE Transmission Engineering, explained that PSE has a department specifically to address trees and vegetation, and frequently grooms and trims trees. There are a variety of trees that can and cannot live next to poles, and there are specific height and width requirements. For example, a recent study showed that building lines next to Douglas Firs (which can grow upwards of 200 ft.) is simply not possible.

**Action Item:** PSE agreed to provide a map that shows the project area (with street names) where all 115 kV and 230 kV lines currently exist.

Penny reminded the group that while PSE is eager to provide the advisory group with additional maps and materials, it is important for PSE to assess security concerns before any map distribution.

### **Questions: GeoRoute Model**

*Will the advisory group get to see impacts on residential properties?*

Lyn Keenan, GeoEngineers, explained that the GeoRoute model uses different layers of information to show where the routes will go; parcel areas, aerial photos and tree canopy data are some of the layers. As the study progresses, she explained that more information can be retrieved from areas the group is more interested in.

*Will NE 132<sup>nd</sup> Street be a more favorable route because there are existing lines?*

Barry explained that this is precisely the kind of criteria the advisory group will have to apply weighting to in regards to choosing a preferred route.

### **Questions: Community Involvement/Public Process**

*How will PSE inform the public about this project?*

Barry explained that PSE will be active in providing open houses, posters, accessible technical experts at community meetings, project updates, and use the project webpage to post new information. After the current public participation process, there is a formal permit process where public outreach continues.

*Is it possible to invite PSE to brief our community (Juanita Neighborhoods)?*

Barry noted that PSE staff will be available to schedule community briefings.

*Will the advisory group have a role in the community meetings to inform the public?*

Penny noted that it is very valuable to have the advisory group present at the meetings and to speak about the process, their input, and have their knowledge about the project.

*What are the current expectations of the advisory group in regards to relaying information back to their respective communities before the next meeting?*

Barry suggested talking to other neighborhood leaders and business associates and to advise people to visit the project website: [www.pse.com/SammJuan115](http://www.pse.com/SammJuan115)

*What are the key messages to take back to the community from this presentation?*

Penny explained that advisory group members should summarize the high points of the PowerPoint presentation, identify that there are issues in the system that need to be fixed, note the type of infrastructure that is being talked about (i.e. the kinds of poles that may be used), and note that while this project is not new, it is a new start to developing community-acceptable alternatives

*Can advisory group members invite members of their community to the meetings?*

Penny noted that members of the community are welcome as observers. We will have a designated public comment session during each meeting.

*What is the current strategy for notifying the public about this project? Is there an informational piece that could be developed to help us talk about what we heard and learned tonight?*

Penny noted that a venue has not yet been selected for the planned public meetings; however PSE welcomes input from the advisory group. She also noted that PSE will talk with the group next meeting about how they are planning to notify the public, and will seek advice and suggestions from the advisory group members.

**Action Item:** PSE will provide the advisory group with a notification strategy for public meetings for the next meeting.

**Action Item:** PSE will provide the advisory group with an executive meeting summary before the next meeting.

**Action Item:** PSE will provide the draft version of the operating guidelines and other materials through the project website.

**Action item:** PSE agreed to send the advisory group a Doodle poll to schedule November meetings.

## Public Comment

*What are the potential impacts of transmission lines? Suggest that PSE share all potential impacts with the community, not just the ones that people have asked about.*

- Interference with radio
- Noise from transmission lines (humming and buzzing)
- Impacts relating to other lines (Seattle City Light)
- Trees
- Visual
- Health

## Wrap-Up and Next Steps

Penny reviewed the next steps, which include PSE sharing additional project details and past route alignments at the next meeting. She reviewed the planned meeting objectives for each of the advisory group meetings during the process. Penny informed the group the next meeting will be on October 17 from 5:30 p.m. to 8:00 p.m. at the same location.

The meeting adjourned at 7:40 p.m.

**Summary of Action Items:**

- **PSE** agreed to provide a map that shows the project area (with street names) where all 115 kV and Seattle City Light 230 kV lines currently exist.
- **PSE** will provide the advisory group with a notification strategy for public meetings for the next meeting.
- **PSE** will provide the advisory group with an executive summary of the information presented before the next meeting.
- **PSE** will provide the draft version of the operating guidelines and other materials through the project website.
- **PSE** agreed to send the advisory group a Doodle poll to schedule November meetings.