

### **Transmission Line Routing Community Sounding Board**

### Information Session 1 Agenda

Thursday, Aug. 6, from 5:30 to 7:30 p.m.

Online Webex Event: CSB members-please refer to your individual links sent via email

### Meeting objective:

- Clarify the project need and purpose of PSE's reliability and grid modernization project, especially the new "missing link" transmission line between Winslow and Murden Cove substations, to provide context for Community Sounding Board routing discussions.
- Provide a more detailed review of the preliminary transmission line study area, providing background on how it was determined to inform Community Sounding Board routing discussions.
- Invite feedback from the Community Sounding Board on the transmission line study area.

Time	Item	Presenter(s)
5:15 p.m.	CSB members are invited to join early to test audio/video before the meeting begins.	
5:30 p.m.	<ul> <li>Opening</li> <li>Welcome and safety moment</li> <li>Agenda overview</li> <li>Meeting conduct</li> <li>Introduction of Jens Nedrud</li> </ul>	Renee Zimmerman, PSE Susan Hayman, Facilitator
5:40 p.m.	Presentation: Project need and solution Q&A, discussion	Jens Nedrud, PSE Andy Swayne, PSE
6:25 p.m.	Break	
6:30 p.m.	Presentation: Transmission Line Study area Q&A, feedback	<b>Kirk Moughamer</b> , HDR Project Manager
7:20 p.m.	Observer comment	Susan Hayman, Facilitator
7:25 p.m.	Wrap up, next steps	Susan Hayman, Facilitator
7:30 p.m.	Adjourn	

# **PSE** on bainbridge island

Transmission Line Routing Community Sounding Board

Information Meeting #1 Project Need, Solutions & Project Area

August 6, 2020



We'll begin at 5:30pm—all participants will be muted. Technical difficulties? Please call or text Darcy Edmunds

# Welcome Community Sounding **Board Members**



# Safety Moment

## TREAT YOUR FACE MASK LIKE UNDERWEAR



- MAKE SURE IT'S CLEAN
- MAKE SURE IT FITS SNUG BUT NOT TOO TIGHT
- MAKE SURE IT COVERS THE IMPORTANT PARTS
- DON'T TOUCH OR ADJUST IT (ESPECIALLY IN PUBLIC)
- DON'T SHARE IT
- THROW IT AWAY IF THERE ARE HOLES OR STAINS
- NOT ALWAYS REQUIRED BUT DEFINITELY ENCOURAGED

## **Panelist Screen Controls**



- Use the microphone icon to unmute
- Use the camera icon to manage your video
- Use the person icon to manage other settings.
- Slides appear in the main window.



## For today



Darcy Edmunds is our meeting host.

Please text/call Darcy if you have technical difficulties

- Attendees are in listen-only mode.
- A brief public comment opportunity will be available at the end of the meeting.
- CSB members:
  - Listen to and appreciate the diversity of views and opinions.
  - Actively participate in the group.
  - Behave constructively and courteously towards all participants.
  - Respect the role of the facilitator to guide the group process.

## Meeting Agenda



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## Bainbridge Island reliability and grid modernization

PUGET

SOUND ENERGY

Jens Nedrud, Manager, System Planning August 6, 2020

## Why are we here tonight?

- Electric reliability needs to be improved
- Committed to exploring new technologies
- Combines new technologies and grid infrastructure
- Partnering with the community to implement solutions



## **Needs Assessment**



## Findings

- Poor transmission reliability
- Aging transmission infrastructure
- Growth: ferry electrification and increased demand for power



## Why do my lights go out so often?



2/3 of customers at risk of outage due to lack of back-up transmission



Transmission line



## **Needs Assessment findings**

## **Poor transmission reliability**



## Solutions Report



Strategic System Planning July 2019

- 10-year planning horizon
- Analyzed traditional "wires" and nonwires alternatives
- Solution uniquely addresses Bainbridge Island's needs







New transmission line and rebuild the aging Winslow Tap to improve reliability

New 3.3 MW battery energy storage system to provide additional capacity

Targeted conservation and demand response tools to reduce demand

Reliability and resiliency

Capacity

## What would help keep the lights on?

New transmission line for improved reliability



Transmission line





## Questions?







## Preliminary Transmission Line Project Study Area

Kirk Moughamer, HDR

## **STUDY AREA**





## **Observer Comment**





- CSB Information Meeting #2: EMF and Undergrounding (date TBD)
- CSB Meeting #4: September (date TBD)—Route Segments

*Remember:* Resource materials for the CSB and overall project are available on PSE's website





# Thank you!

## Modernizing the grid







### Transmission Line Routing Community Sounding Board Information Session 1 Summary August 6, 2020

### Overview

Puget Sound Energy (PSE) hosted an online information session for Community Sounding Board (CSB) members on August 6, 2020. The meeting's purpose was for CSB members to gain additional information about the project needs and solutions and to provide feedback on the preliminary transmission line study area.

The meeting was held online via Webex due to PSE and public health requirements restricting in-person gatherings at this time. Attachment 1 contains the list of meeting participants.

### **Opening remarks**

Renee Zimmerman (PSE) welcomed the group, shared a safety moment, and provided a brief recap of CSB Meetings 1, 2, and 3. Renee also announced that she is transitioning off the project to fill a staffing need on another PSE project. Kierra Phifer (PSE) will be taking over Renee's role as PSE's point of contact for the CSB.

### Project needs and solutions overview

Jens Nedrud (PSE) gave a <u>presentation</u> on the overall Bainbridge Island reliability project needs and solutions. The presentation began with a synopsis of PSE's <u>Needs Assessment</u> for Bainbridge Island, which identified three key findings: poor transmission reliability, aging electrical infrastructure, and a capacity need due to increased demand for power (local growth) and ferry electrification.

To address the island's capacity need, PSE plans to build a 3.3 MW battery for use during peak hours and will deploy targeted conservation and demand response tools to reduce demand during peak power usage. The success of the conservation and demand response tools will be dependent on the participation of Island residents and businesses.

To improve reliability on Bainbridge Island, PSE plans to build the "missing link" transmission line between Murden Cove substation and Winslow substation to complete the transmission line loop and rebuild the aging infrastructure of the Winslow Tap transmission line. By connecting Murden Cove substation and Winslow substation with a new transmission line, the completed transmission system loop will create alternative transmission pathways to Murden Cove and Winslow substations to receive power if the substation's primary transmission pathway is disrupted.

Jens noted that while ferry electrification was an important consideration in the needs analysis and factor for the capacity needs, it wasn't a driver for the proposal to build the new transmission line.

PSE answered questions from CSB members throughout the presentation. PSE responses and key discussion points are noted below:

### • How many power outages does Bainbridge Island experience yearly?

On average, PSE customers served by Winslow substation experience three times the number of power outages compared to other communities in PSE's service area. As required by state and federal agencies, PSE provides yearly reports of documented power outages to the Washington Utilities and Transportation Commission (WUTC). Though power outages often happen during the winter when strong winds blow trees and branches into powerlines, they can also happen on "blue sky days" where there is no wind and a branch falls onto a power line.

What's the point of demand response tools if you're improving reliability and adding capacity? Haven't we already achieved as much community conservation as we are likely to? Between 2010 and 2013, residents of Bainbridge Island participated in PSE's Repower Bainbridge program. The goal of the program was to reduce the energy footprint of residential homes by educating residents on how to improve their home energy efficiency (i.e. switching to LED lightbulbs). Bainbridge Island residents have done well continuing conservation practices. PSE now wants to partner with the community on energy efficiency and demand response tools. Demand responses tools include those like smart thermostats and smart water heaters which can lower electricity usage during periods of peak energy demand and increase energy efficiency of homes and businesses.

Jens noted that even if there was no ferry electrification and no more growth, we'd still need to solve the island's reliability issue, so we'd still need to build a new transmission line.

### • Why build a battery instead of building another substation?

PSE expects that the non-wire solution using a battery, combined with conservation and demand response, will address the capacity needs on Bainbridge Island for the next 15 years. Considering the cost-effectiveness and longevity of the investment, PSE expects that the 3.3 MW battery, together with energy efficiency and demand response tools, will keep pace with forecasted growth on Bainbridge Island. PSE has also heard from the Bainbridge Island community that alternatives should be considered prior to the planning for a new substation. PSE engineers and consultants are designing the battery to provide additional needed energy for up to 2 hours during peak energy usage periods. State and federal safety guidelines will be followed for the testing and use of the battery.

#### • General observations:

 I received a postcard about PSE's meter replacement program: how does that relate to all of this? PSE is replacing all its electric meters with upgraded meters that use new technologies. Our existing meters provide one-way communications from the meter to PSE for billing purposes of energy use. New Advanced Metering Infrastructure (AMI) meters will provide two-way communications between meters and PSE's energy system for reporting energy use and use of demand response tools. Customers will be able to access this information from their meters on the PSE.com website.

### Preliminary transmission line study area overview

Kirk Moughamer (HDR) gave an overview on the preliminary study area for a new transmission line between Murden Cove substation and Winslow substation. Kirk explained that given the geographic features within the preliminary study area, PSE is looking for a route between the two substations in an efficient manner. To clarify the eastern boundary of the preliminary study area, PSE updated the study area map to show Ferncliff Ave NE's proximity to the eastern border.

Kirk and Andy Swayne (PSE) answered questions from CSB members throughout the presentation. Responses and key discussion points are noted below:

- Would routing the transmission line along State Route 305 (SR 305) require additional permitting? If PSE decides to route the "missing link" along SR 305 or crosses SR 305, WSDOT will be the primary permitting agency for that segment. Because SR 305 is designated as a scenic highway, PSE noted that the permitting process for the transmission line would be more challenging and may extend the project timeline.
- The Winslow Tap transmission line is mostly a straight line, why does it take a more curving route as it approaches the Winslow substation? The Winslow Tap transmission line follows a mostly cross-country alignment with portions passing through densely vegetated areas. The line is located along Eagle Harbor Drive NE and Bucklin Hill Road to take advantage of

available public rights-of-way and minimize encroachment on sensitive areas. If PSE were to propose using this existing corridor to accommodate a second transmission line, significant additional property rights (easements) would be needed to widen and access the corridor, as well additional impacts and challenges including significant tree removal. In general, PSE tries to minimize impacts to property owners.

- Has PSE considered relocating the existing Winslow Tap transmission line to facilitate routing a new transmission line? PSE would consider route options that would relocate a portion of the existing Winslow Tap transmission line if the segment is viable, efficient, and is shown to be prudent. Careful consideration is being put into the development of route segments and route options that provide high reliability for the planned new "missing link" transmission line. While the cost to construct and maintain the transmission line is an important consideration, it is not the only factor in routing decisions.
- Are you planning any route segments to be underground? The new "missing link" transmission line is being planned as an overhead transmission line. Potential undergrounding considerations will be discussed at CSB Information Session #2 planned for September 2020.

### Feedback on preliminary transmission line study area

Following the presentation and clarifying questions, CSB members were asked to provide feedback on the preliminary study area. Key discussion points and observations are noted below:

- Expanding the study area to include Ferncliff Ave NE: One CSB member stated that including Ferncliff Ave NE within the study area presents a wider range of routing options. Others pointed out that such routing options would present both opportunities and challenges.
- Going outside the study area boundary box: Kirk noted that PSE will focus on route segments and route options within the study area. This does not preclude PSE from considering a segment outside of the study area if there is a compelling reason to do so.
- Eagle Harbor: CSB members disagreed on the extent to which Eagle Harbor should be included in the study area. They discussed that while including Eagle Harbor would present a potential underwater segment opportunity, the challenges and potential risk with permitting and constructing such a segment may make inclusion in the study area not very useful. A CSB member observed that to keep the project on track with the goal of improving reliability sooner rather than later, PSE will need to find ways to minimize risks and uncertainty.

### **Public Comment**

There were no members of the public in attendance at this meeting.

### Next steps: upcoming meetings

CSB Information Session 2: September 2020, 5-7:00 p.m. (specific date to be determined)

### **Closing remarks**

Susan and Kierra thanked CSB members for participating. The meeting concluded just after 7:30 p.m.

### **Attachment 1: Meeting Participants**

### **Community Sounding Board**

Individual Interests Bill Lemon Carl Siegrist Keith Bass Winifred Perkins

Organizational Interests

Hank Teran, Bainbridge Island Fire Department Maradel Gale, Sustainable Bainbridge Perry Barrett, Bainbridge Island Metro Parks & Recreation District Stephen Hellriegel, Net253 LLC

#### **PSE Staff**

Andy Swayne, PSE CSB Technical Liaison Barry Lombard, PSE Project Manager Jens Nedrud, PSE Kierra Phifer, PSE Renee Zimmerman, PSE Community Projects Manager

HDR Staff Kirk Moughamer, HDR

### **Envirolssues Staff**

Darcy Edmunds, Envirolssues, Webex host and technical support Nyles Green, Envirolssues, Notetaker Susan Hayman, Envirolssues, Facilitator

#### Observers

Bridget Brown, HDR Diann Strom, PSE Gretchen Aliabadi, PSE Kerry Kriner, PSE Shelby Naten, PSE Vanessa Bauman, HDR