# South Tacoma Way to Gravelly Lake substation transmission line upgrades

Delivering your energy future

January 2011

# Puget Sound Energy is upgrading your electric system in the Lakewood area

#### What is the project?

Puget Sound Energy plans to upgrade 4.5 miles of our existing low-voltage 55 kilovolt transmission lines to our now current standard of 115 kV between South Tacoma Way and our Gravelly Lake substation, 8304 Washington Blvd. SW, in Lakewood. Specifically, our project includes:

- Rebuilding existing 55 kV line segments to 115 kV standards along portions of Gravelly Lake Drive Southwest, Lakeview Avenue Southwest and Durango Street Southwest;
- Constructing a new 115 kV transmission line segment on an existing distribution line along portions of 111<sup>th</sup> Street Southwest and 112<sup>th</sup> Street Southwest;
- Constructing a new 115 kV transmission line segment parallel to our existing 115 kV line, and rebuilding the existing 115 kV line along a portion of Lakeview Avenue Southwest; and
- Removing our existing 55 kV line segment along Whitman Avenue Southwest, Motor Avenue Southwest and Tyler Street Southwest. Some overhead distribution electric facilities will remain to serve our customers.

(See project map on back for details.)

This project is one of several in our Woodland-St. Clair transmission line and substation projects to upgrade our existing electric system for our customers in Lakewood and portions of unincorporated Pierce County.

## Why does PSE need to upgrade the local transmission lines?

PSE is upgrading our aging 55 kV transmission lines, which were originally constructed in the 1940s, to 115 kV to increase electric reliability and meet current and future demand for power for our customers in Lakewood.

# How will this benefit you and your community?

Upgrading our lines from 55 kV to 115 kV allows us to increase the line capacity, helping to ensure our customers' electricity needs are met now and in the future. Additionally, the power line upgrades will immediately increase electric reliability for our Lakewood-area customers by providing a redundant 115 kV source of power to the local substations. If one line loses power, we can serve our customers from another line, avoiding or shortening the duration of an outage.

Furthermore, we will increase electric reliability by removing our existing 55 kV line that currently runs along the backs of residents' homes, and as a result, is difficult to access. Relocating the line along public rights of way will greatly improve accessibility and allow our crews to make repairs more quickly in the event of an outage, resulting in faster restoration times for our Lakewood residents. In addition, relocating the line to a less vegetated area will decrease the number of tree-related outages and reduce the amount of vegetation management needed to maintain the line.

### **Project schedule**

Rev. 1/11/2011

• Design, permitting and public outreach: winter 2010-11 – spring 2011

• Construction of new line: summer/fall 2011

Completion of new line: late 2011
Removal of old line: early 2012



#### What will the work entail?

- Trimming and removing vegetation along the route
- Installing new transmission poles and associated electrical equipment
- Stringing transmission line
- Removing existing transmission poles and lines
- Site restoration, including landscaping

Construction will be confined to normal daytime working hours during the week, with the possibility of some work on Saturdays. Much of the transmission rebuild work will be in roads along public rights-of-way. When working in or along roads, signs and flaggers will help direct traffic.

# Why are transmission lines necessary?

Transmission lines are key elements in the electrical distribution system. The lines safely transport high voltage electricity from power generation sources like dams and wind generating facilities to substations in local communities. Transmission normally takes place at voltages of 55 kV and higher.

#### **PSE's commitment**

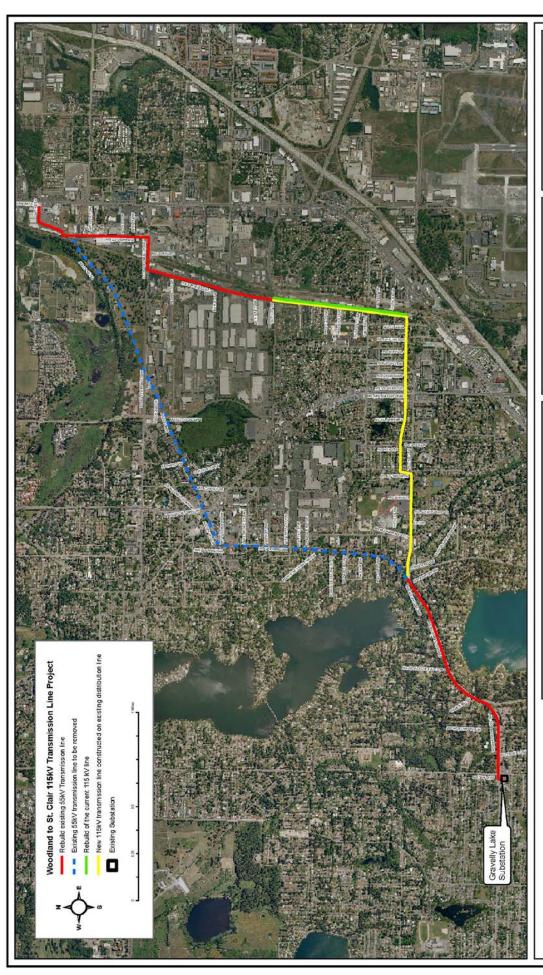
PSE's mission is to deliver vital energy to meet the needs of our customers now and in the future. We are committed to keeping everyone informed of scheduled activities in their communities, and to ask for suggestions and opinions from them as we plan those activities.

#### For additional information/questions please contact:

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Woodland to St. Clair 115kV Transmission Line Project

Gavelly Lake Substation to South Tacoma Way

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