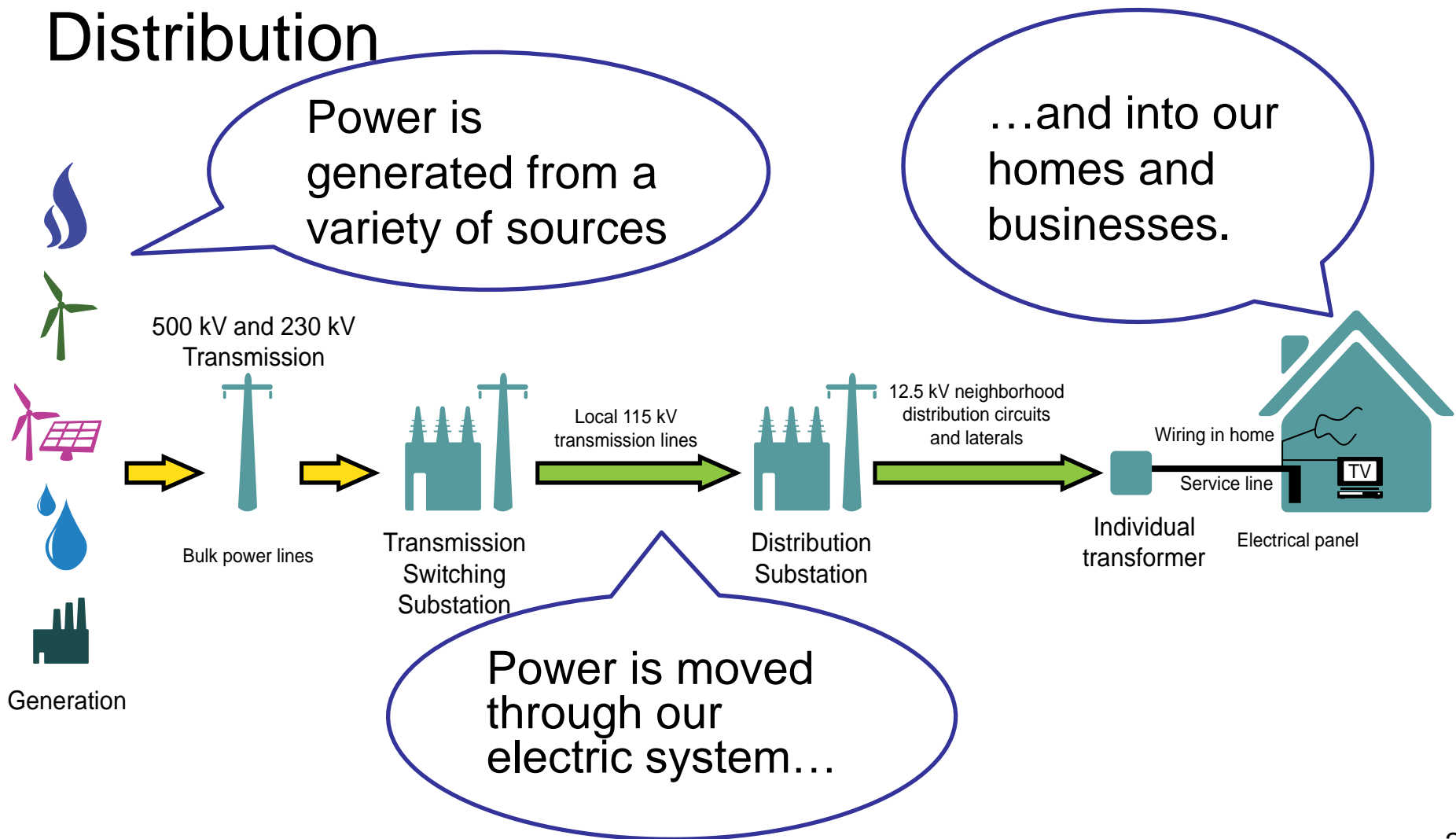


Sammamish-Juanita 115 kV Project

Powering the Northern Redmond-Kirkland Area

How power gets to you

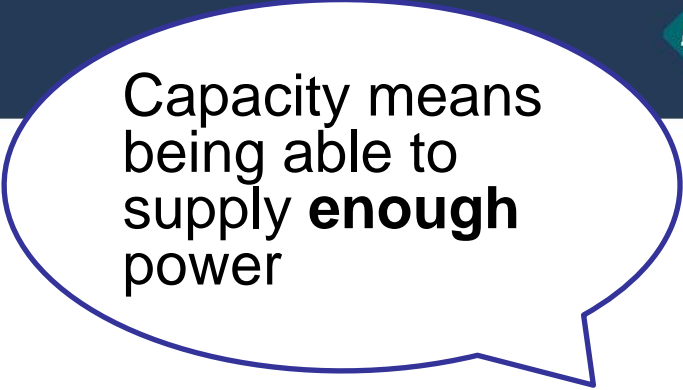
Distribution



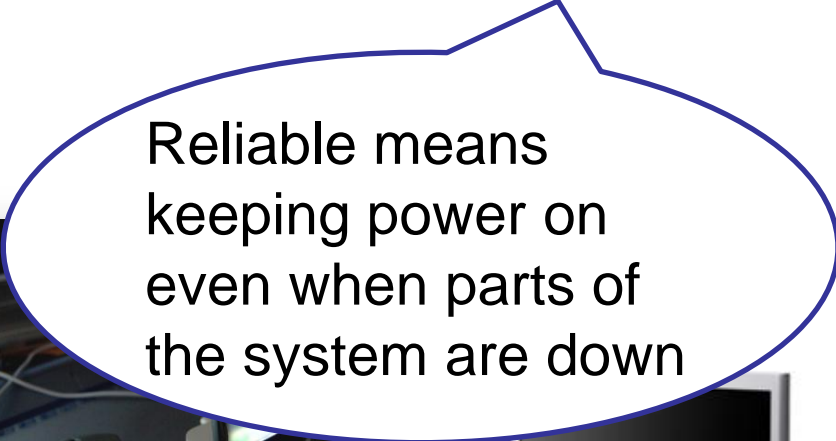


What's the problem?

- Demand for power is growing
- Demand for power is pushing limits of system capacity
- Our job is to keep your lights on and we need a reliable system to do so



Capacity means being able to supply **enough** power



Reliable means keeping power on even when parts of the system are down





Solutions to capacity and reliability challenges






- Expand or rebuild existing infrastructure
- Build new infrastructure
- Energy efficiency
- Alternative energy
- Energy storage

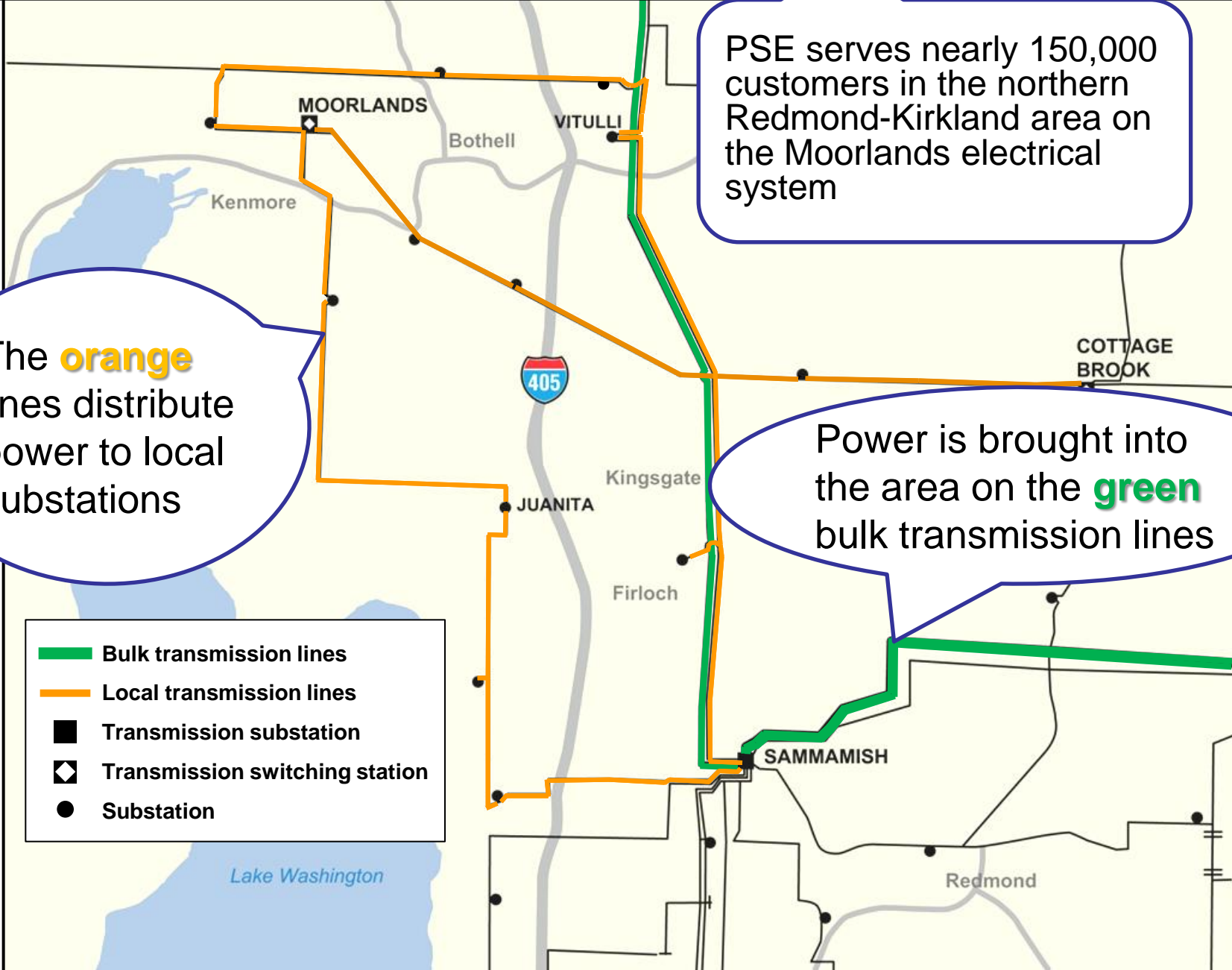
Keeping the power on in the Northern Redmond-Kirkland area

PSE serves nearly 150,000 customers in the northern Redmond-Kirkland area on the Moorlands electrical system

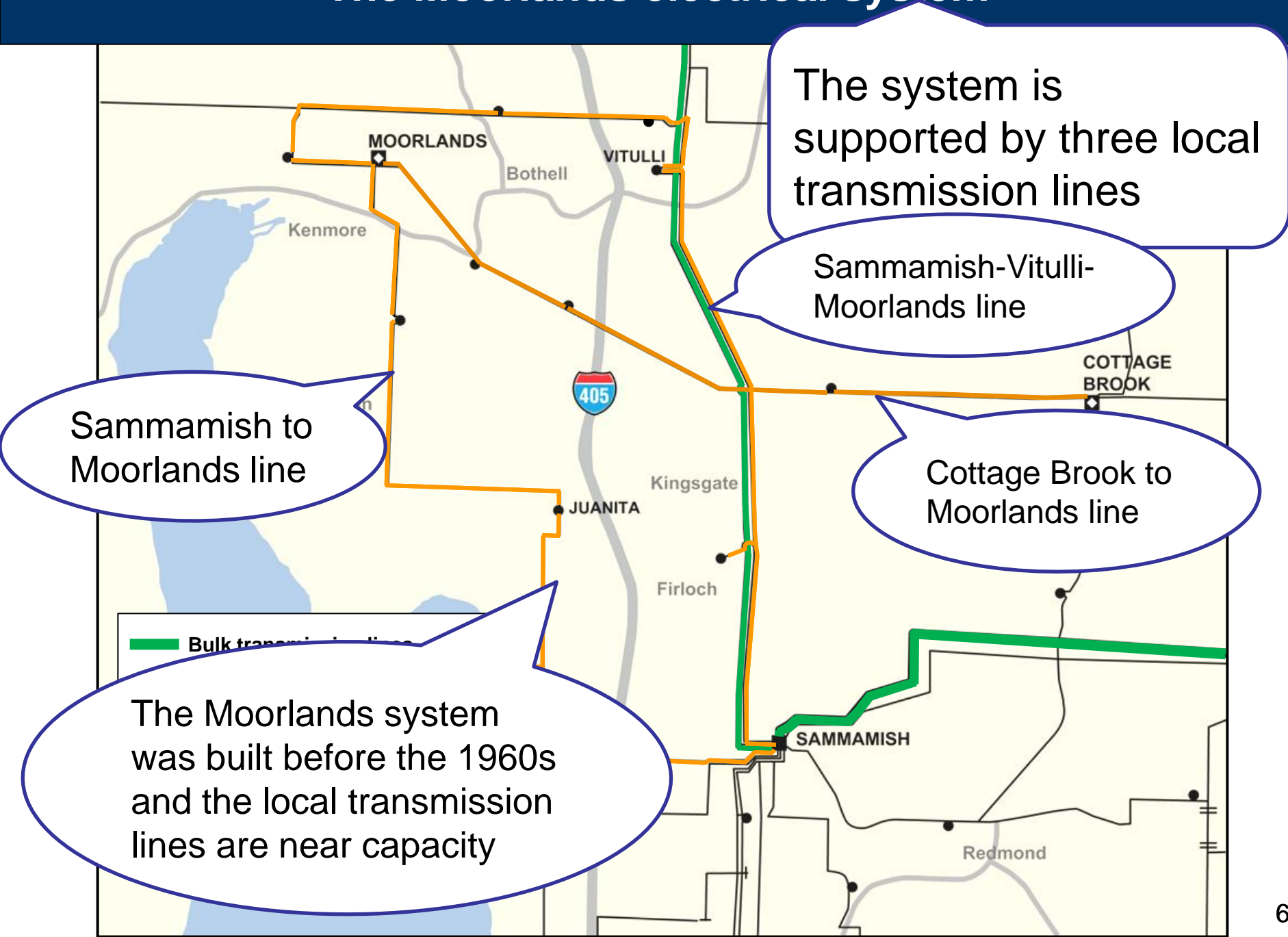
The **orange** lines distribute power to local substations

Power is brought into the area on the **green** bulk transmission lines

-  Bulk transmission lines
-  Local transmission lines
-  Transmission substation
-  Transmission switching station
-  Substation

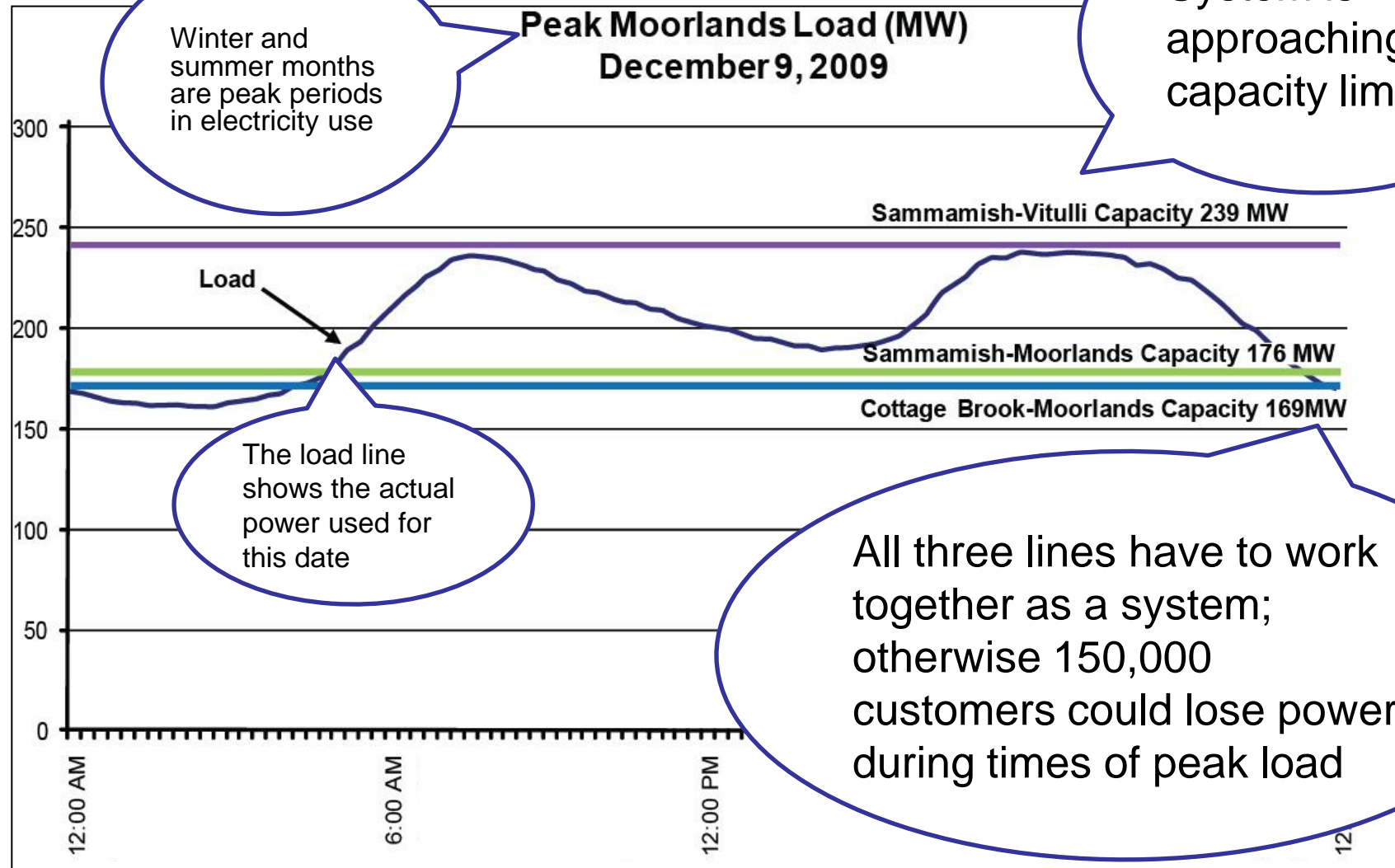


The Moorlands electrical system





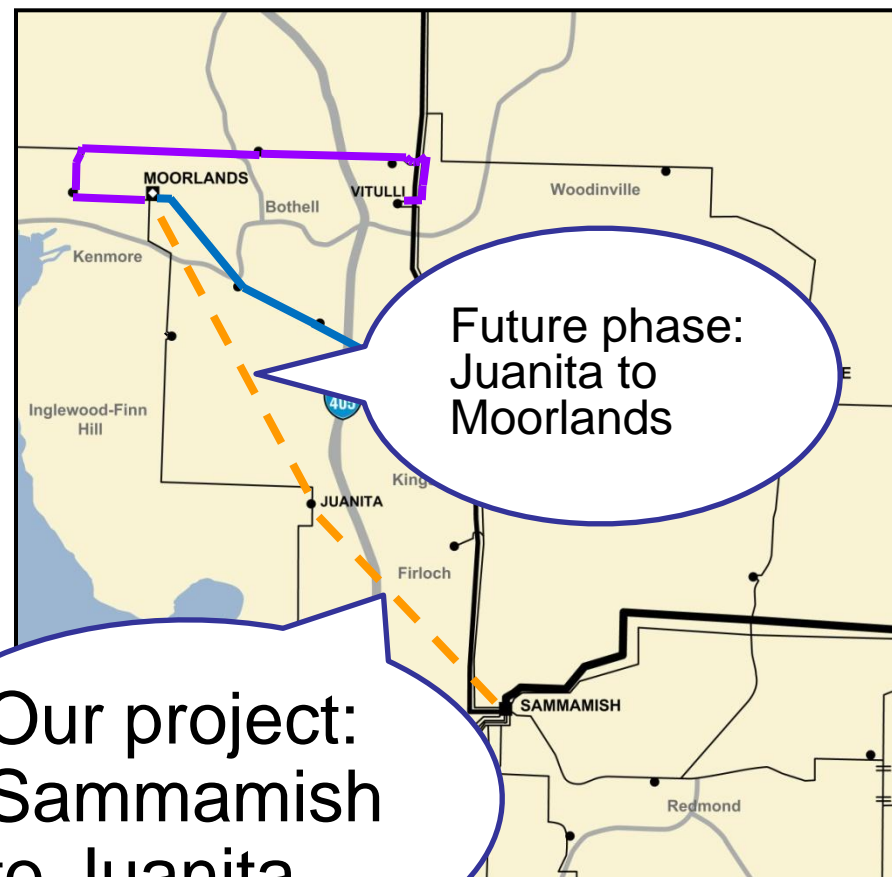
Current Moorlands capacity





Moorlands System Projects

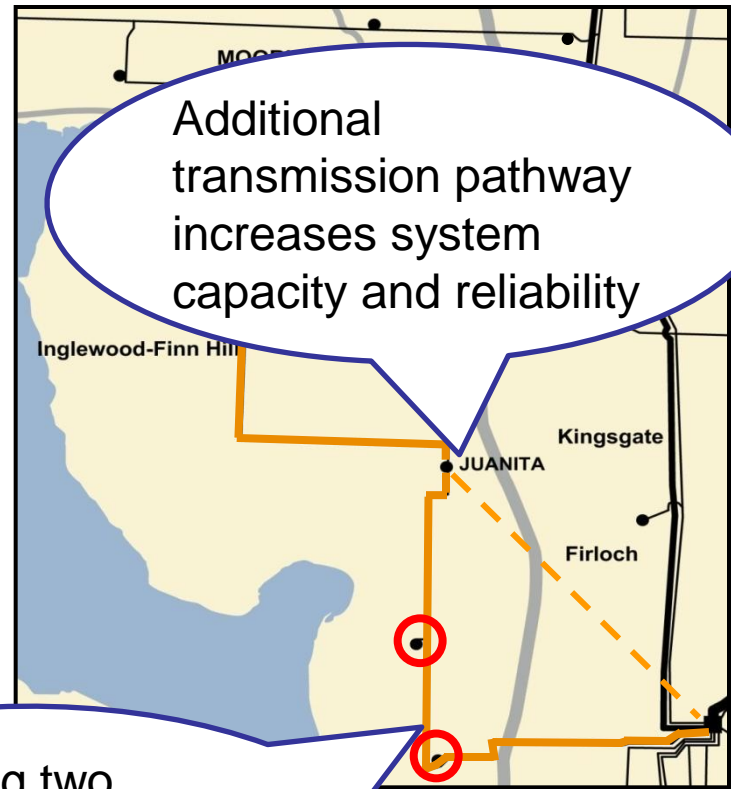
-  Cottage Brook-Moorlands Project - Rebuild by 2013
-  Moorlands-Vitulli Project - Rebuild by 2014
-  Sammamish-Juanita-Moorlands Project - New lines in two phases





Sammamish-Juanita 115 kV Project

- A new line will:
 - Improve reliability by adding an additional transmission pathway for the system
 - Increase available capacity by transferring two substations off the existing system
 - Ensure dependable power so it is there when you need it



Additional transmission pathway increases system capacity and reliability

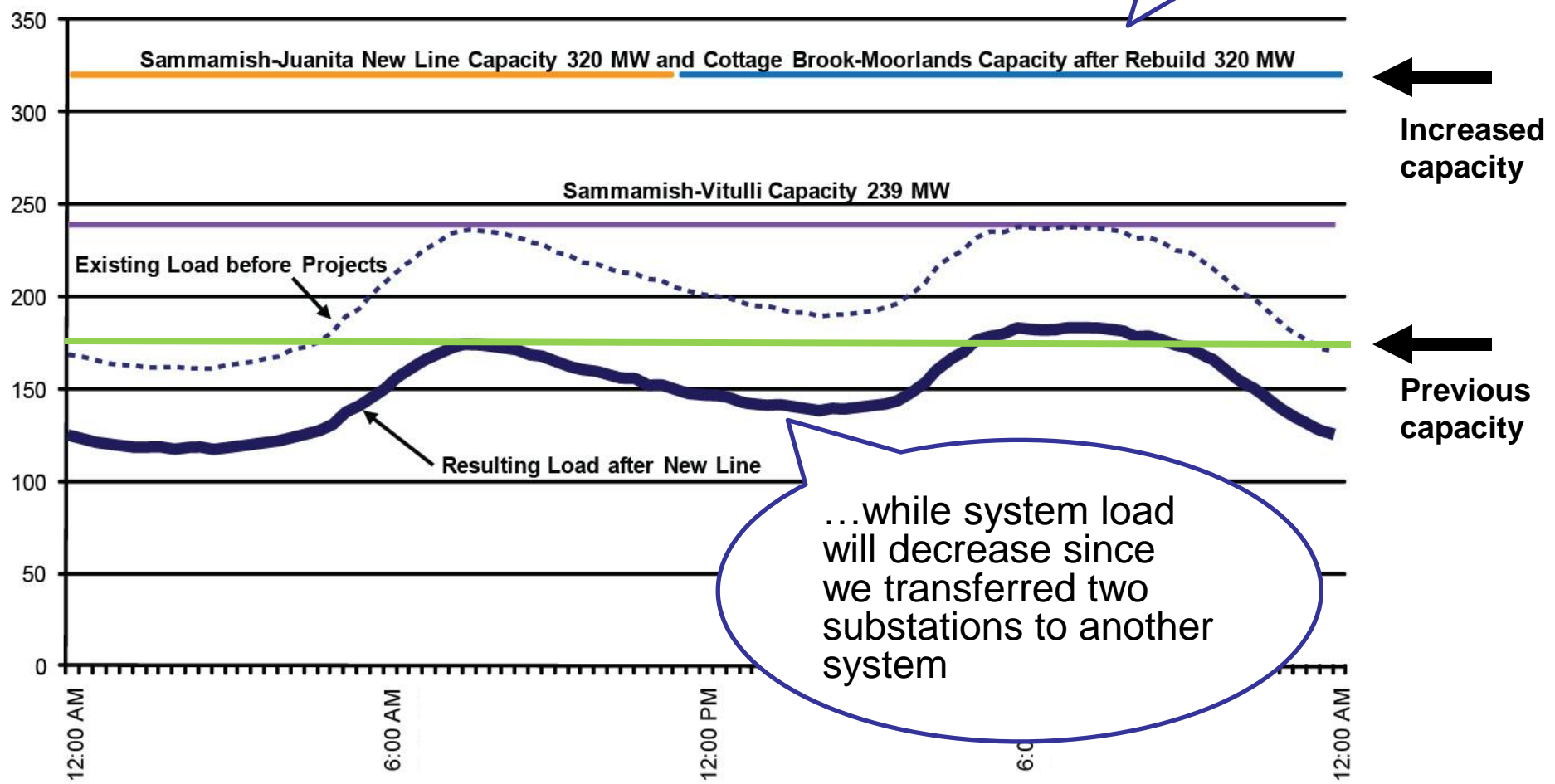
Transferring two substations to another system increases capacity on the Moorlands system



Sammamish-Juanita 115 kV Project

Winter Moorlands Peak Load (MW)
December 9, 2009

After all three projects have been built, system capacity will increase...



...while system load will decrease since we transferred two substations to another system



How will the Sammamish-Juanita 115 kV Project benefit my community?

The new transmission line will:

- Increase electric capacity to serve customer demand
- Reduce the risk for power outages
- Ensure PSE can continue to supply 150,00 customers in Redmond and Kirkland with dependable power for years to come