

PNUCC

Natural Gas and Electric Power Workshop May 24, 2011

Steven D. Kern
Officer, Power Supply and Environmental Affairs
Email: steve.kern@seattle.gov



Seattle City Light

**Power Supply &
Environmental Affairs**

What system operation issues are keeping me up at night?

- Power Supply
 - Uncertainty regarding new renewable/wind generation resources (e.g. zero to 3,500 MW, or 3,500 MW to zero).
 - Current dependency on natural gas generation to cover underperformance of resources within hour and within day
 - Impact on system reliability to meet customer obligations
 - Is the supply and transportation there?



What system operation issues are keeping me up at night?

- Transmission
 - Increased renewable/new resources add significant complexity to short term and overall operation of transmission system
 - Exposure to more real-time cuts and reduction in short term transmission service
 - Transmission much more complex than Transportation
- Markets
 - Increasing volatility in within-day, daily and balance-of-markets.
- Staffing/Operations Experience

What system operation issues are keeping me up at night about the “other/natural gas” industry?

- Does the Northwest natural gas industry understand our current and expected reliance on natural gas (supply and transportation)?
- What capacity and flexibility does the Northwest natural gas system have today? Operation challenges?
- How or will the major pipelines and suppliers respond to the electric system needs?
 - (e.g. no-notice service, new storage, 7 days per week gas noms and power scheduling)



Questions and Answers



Seattle City Light

**Power Supply &
Environmental Affairs**