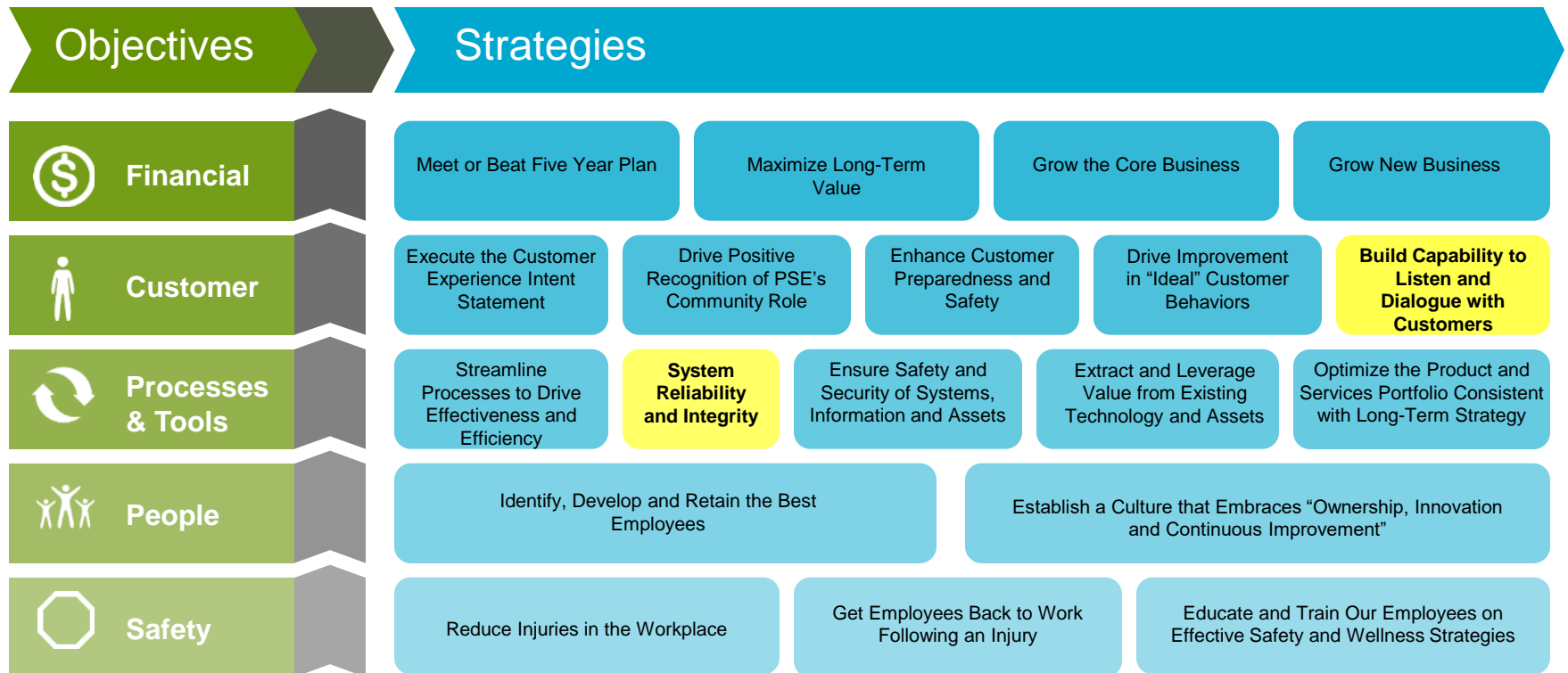


# Energize Eastside

## **East King County 230 KV Transmission Upgrade Project**

# Safe. Dependable. Efficient.

What strategy does your presentation relate to?



# Requested Board Action

No specific Board action requested; this is an informational update only.

*The Energize Eastside project is a large multi-year project to add a new transmission line that is needed to serve PSE customers. The funds required for the project have been included in the 2014 Budget and 2014-2018 Five-year Financial Plan. Due to the scope of the project and potential impact to stakeholders, this discussion is intended to share information on the need for the project, potential financial impact, risks, and company strategy.*

# Previous Board Interaction

The Energize Eastside project was discussed during the:

## **Board meeting on January 11, 2012**

- A preliminary overview of the project was provided in conjunction with a discussion on “Successfully Building Energy Infrastructure in Areas Transitioning from Rural-to-Urban”

## **Governance Committee meeting on November 7, 2013**

- The project’s “Communications and Public Affairs Campaign” was discussed as part of the Public Affairs Update.

# Background

- Eastside region: More than 330,000 PSE customers live and work in the cities of Renton, Newcastle, Bellevue, Kirkland, Redmond and Sammamish – a region commonly called the “Eastside.” The Eastside region accounts for nearly one third of PSE’s 1.1 million electric customers, and over the last two decades has transformed from bedroom communities into urbanized centers of job growth and economic activity.
- Regional growth: By 2040, the residential population of the Eastside is forecast to grow by 33 percent and employment is forecast to grow by 70 percent. Eastside cities are among the fastest-growing in the state.
- Electric system constraints: The electric transmission system serving the Eastside was first built in the 1930s and last upgraded in the 1960s. Current growth studies project that electric demand from Eastside residents and businesses will exceed PSE’s ability to supply dependable power during times of peak demand as early as 2017.
- Options considered: PSE and 3<sup>rd</sup>-party experts analyzed a number of options for meeting the Eastside’s growing energy needs, including: 1) enhancing the existing transmission system; 2) expanding conservation programs and 3) constructing local power generation plants. Upon review, a new transmission line with capabilities to serve a larger number of customers became the preferred solution to meet customer needs.

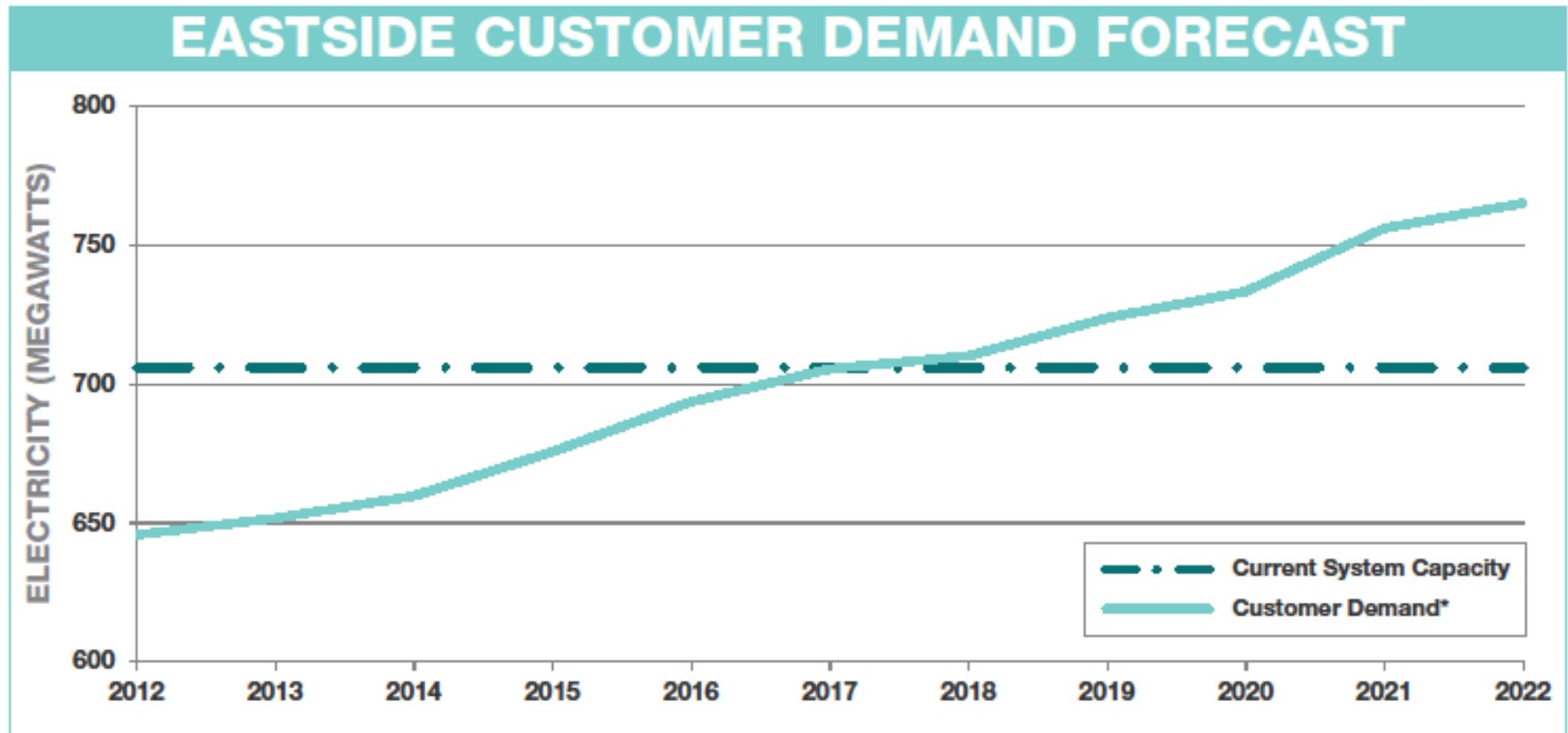
# Background

- Energize Eastside project: The Energize Eastside project will build a new, transmission line with greater capabilities to support the region's jobs and housing growth while providing greater reliability.

In 2014, the project team will deploy an extensive community engagement process to build local stakeholder support and obtain stakeholder input on potential transmission line route options prior to PSE selecting a final route. Proposed route options being considered have been selected to minimize community impact, and use existing utility and public rights-of-way wherever possible.

PSE plans to select a route by early 2015 which is a prerequisite for the next phases of the project – final design and permitting – which in turn determines the estimated cost of the project. Once a route is selected, permitting will be secured and design finalized in 2015-16. Construction is planned for 2017-18. Initial plans envision an 18 mile transmission line with cost projections ranging between \$150 million to \$300 million.

# Background



\*Customer Demand assumes 100% of conservation goals are met.

# Risks/Opportunities

## RISK MATRIX – Early Development Phase

(prior to route selection, permits & design)

Risk	What (define risk)	Probability (high/medium/low)	Magnitude (high/medium/low)	Mitigation Plan to address risk
Financial	Estimated cost and timing of expenditures is dependent on route selected <sup>1</sup>	High	High: project estimates range between \$150 - \$300 M, depending on the route	Re-estimate when route is selected in 2014 and utilize project playbook strategy <sup>2</sup>
Political	City/County officials do not grant permits	Medium	High: permits have to be approved to launch construction phase	“Energize Eastside” Communication Advocacy strategy <sup>3</sup>
Reputational	Widespread customer/community opposition	Medium	Medium	“Energize Eastside” Communication Advocacy strategy <sup>3</sup>
	Frustration with power outages <sup>4</sup>	Low: until specific outages occur	Medium	Remedial operation plans <sup>5</sup> until new line is built
Legal	Project delays or lawsuits regarding permit process, property impacts, & EMF <sup>6</sup> . Condemnation litigation to secure property rights.	High	Medium: could result in higher costs and delays in the schedule Low: risk of project not getting built	Ongoing legal participation on project team & early identification of property needs and equitable offers to current land owners.
Regulatory	Cost recovery in customer rates	Low	Medium	Prudency documentation, playbook strategy & regular regulatory updates
Compliance	Existing line overloads resulting in penalties	Low: Increases after 2017	Medium	Remedial operation plans <sup>5</sup> until new line is built

1. See slide 9 for additional detail on cost estimate range.
2. See appendix for details on project playbook strategy.
3. See appendix for details on communication/advocacy strategy.
4. As electric load grows, approximately 60,000 customers at risk from resulting power outages.
5. Temporary reconfiguration of the power system during times of high electric demand.
6. Electro Magnetic Field (EMF).



# Financial Analysis

- The current estimated costs for the project is \$150 - \$300 million.
- Approximately \$210 million is in the 2014-2018 Plan. The estimated total cost and year-to-year spend will change as route, permitting, schedule and design details are finalized.

Spend to Date	2014	2015 - 2018	Total (\$ in M)
\$5.6	\$10	\$200	\$215

- The estimate will be updated in late 2014 when the preferred route is selected.

# Impacts to Customers

## Benefits

- The project will accommodate current and future population growth and anticipated economic development.
- System stability and reliability will be retained and enhanced.

## Concerns

- Project will impact residential properties and views.
- Expressed health and safety concerns caused by Electric Magnetic Fields (EMF).
- Cost of project will impact customer rates.

# Next Steps

## **Jan. 2014 – Q4 2014**

- Establish the Community Advisory Group (CAG)\*
- Host Open House Public Meetings, Neighborhood briefings and provide continual educational and other communications to various constituencies

## **Q4 2014**

- Choose Preferred Route
- Update project risks, schedule and estimated project costs

## **2015-16**

- Permitting process

## **2017 – 2018**

- Construction

*\* Including PSE, the CAG is comprised of representatives from 10 stakeholder groups*

# Requested Board Action

No specific Board action requested; this is an informational update only.

*The Energize Eastside project is a large multi-year project to add a new transmission line that is needed to serve PSE customers. The funds required for the project have been included in the 2014 Budget and 2014-2018 Five-year Financial Plan. Due to the scope of the project and potential impact to stakeholders, this discussion is intended to share information on the need for the project, potential financial impact, risks, and company strategy.*

# Appendix

# Project “Playbook” Strategy

- **Playbook Goal:** Align all disciplines to guide a coordinated effort.
- **Strategy:** Develop a holistic project playbook that incorporates all project aspects from planning to engineering to community involvement to construction, and execute through each stage with attention to the **key messages**.
  - *Planning:* Detailed needs, solution & route alternatives assessment.
  - *Advocacy & Outreach:* Robust customer, community, political, and stakeholder outreach process – consistency in message.
  - *Permitting:* Planned in conjunction with and supported by political and community outreach.
  - *Engineering & Construction:* Support outreach and permitting with designs and information; execute traditional construction activities (surveying, mobilization, installation, commissioning).
  - *Real Estate & Vegetation Management:* Engage in outreach and mitigate impacts on tough issues e.g., property values, tree removal

# Communications/Advocacy Outreach Strategy

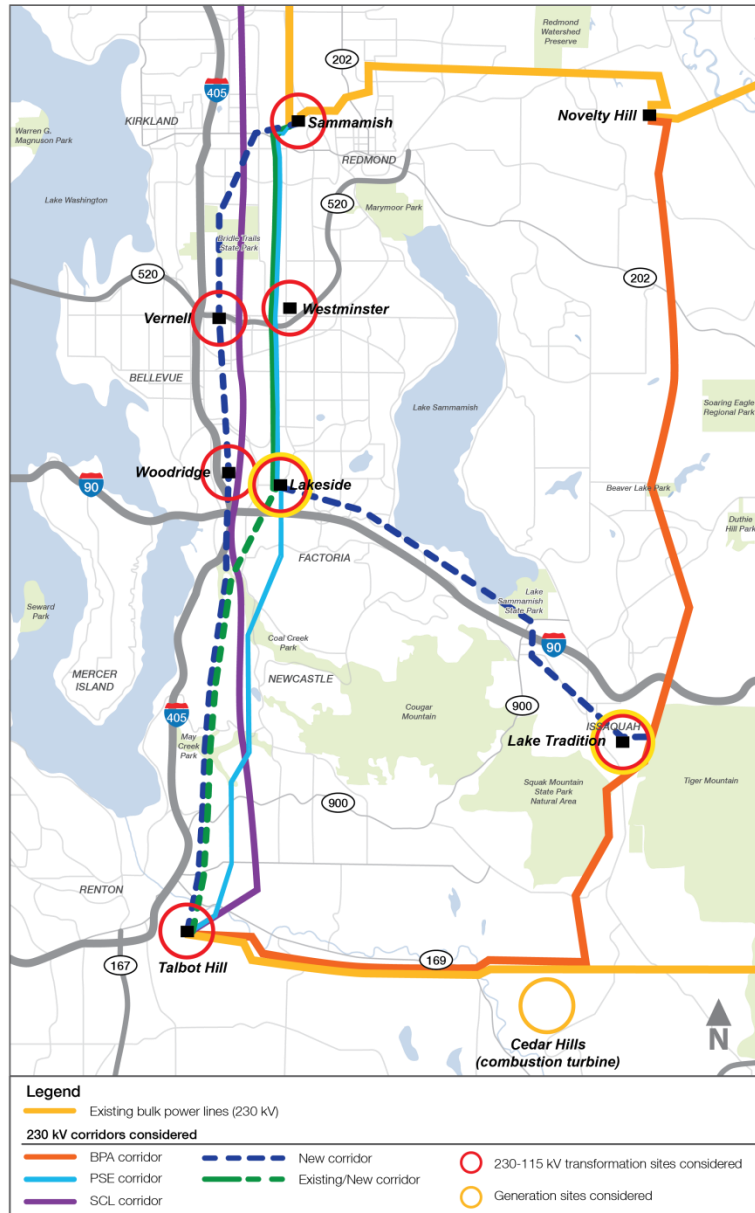
- **Outreach Goal:** Achieve necessary permits to construct transmission line while maintaining positive reputation with affected jurisdictions, customers and electeds.
- **Strategy:** Engage in a robust customer and community engagement process that sets up a defensible and timely permit process.
  - *Pre-launch:* campaign on need and community engagement process – customers, electeds and key community leaders
  - *Project Launch:* campaign on need, community engagement process and potential solutions/routes selection process – same audiences
  - *Community Advisory Group:* In-depth advisory process anchors outreach.
  - *Local Political Advocacy:* No surprises for electeds. Create support group of key community leaders

# Background





# Options considered



## Options

- ★ Transmission line to new or expanded substation – *selected option*
- ✘ Do nothing – *does not meet capacity need*
- ✘ Conservation – *does not meet capacity need*
- ✘ Transformer only addition – *additional transmission lines required to meet capacity need*
- ✘ Local Generation – *additional transmission lines required to meet capacity need*