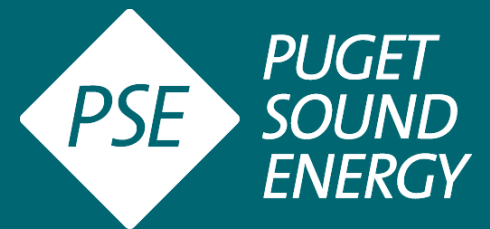
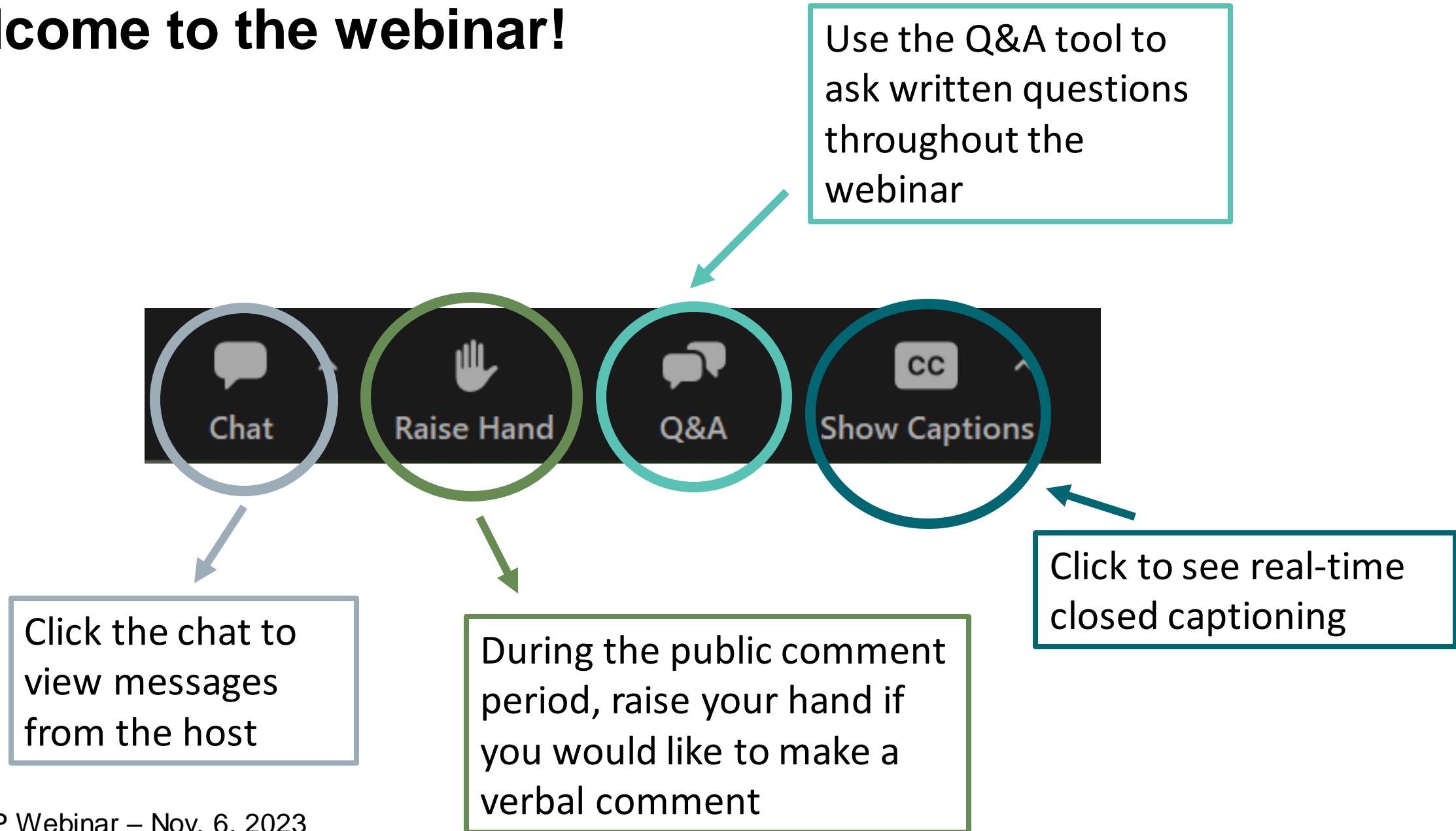


# Equity in Delivery System Planning

November 6, 2023



# Welcome to the webinar!



# Facilitator requests

- Engage constructively and courteously towards all participants
- Respect the role of the facilitator to guide the group process
- Avoid use of acronyms and explain technical questions
- Use the Feedback Form for additional input to PSE
- Aim to focus on the webinar topic
- Public comments will occur after PSE's presentations

# Safety moment

## Drive safely at night

- Daylight Saving Time is over - it's getting darker at night
- Clean your windshield and headlights
- Check your tire traction
- Minimize distractions
- Don't drive fatigued (or if you've been awake for more than 16 hours)

# Today's speakers

## **David Landers**

Director, System Planning, PSE

## **Ryan Lambert**

Manager, Electric System Planning, PSE

## **Sophie Glass**

Facilitator, Triangle Associates

# Today's objectives

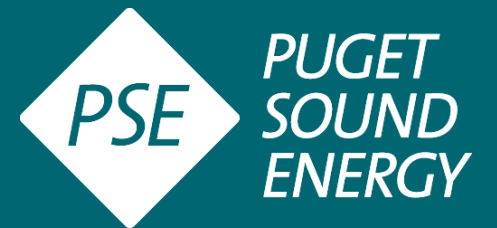
- Provide baseline understanding of Delivery System Planning (DSP)
- Solicit input regarding priorities for community based resources
- Gather input regarding equitable treatment of measures that can enhance distribution carrying capacity

# Agenda

Time	Agenda Item	Presenter / Facilitator
1:00 p.m. – 1:05 p.m.	Introduction and agenda review	Sophie Glass, Triangle Associates
1:05 p.m. – 1:15 p.m.	Overview of Delivery System Planning (DSP)	David Landers, PSE Ryan Lambert, PSE
1:15 p.m. – 1:25 p.m.	DSP and the IRP	David Landers, PSE Ryan Lambert, PSE
1:25 p.m. – 1:35 p.m.	Enabling tools for Distributed Energy Resources and community-based resources	David Landers, PSE Ryan Lambert, PSE
1:35 p.m. – 1:40 p.m.	Additional considerations in the DSP process	David Landers, PSE Ryan Lambert, PSE
1:40 p.m. – 1:50 p.m.	Poll and Q&A	Sophie Glass, Triangle Associates
1:50 p.m. – 2:00 p.m.	Public comment	Sophie Glass, Triangle Associates
2:00 p.m.	Adjourn	All

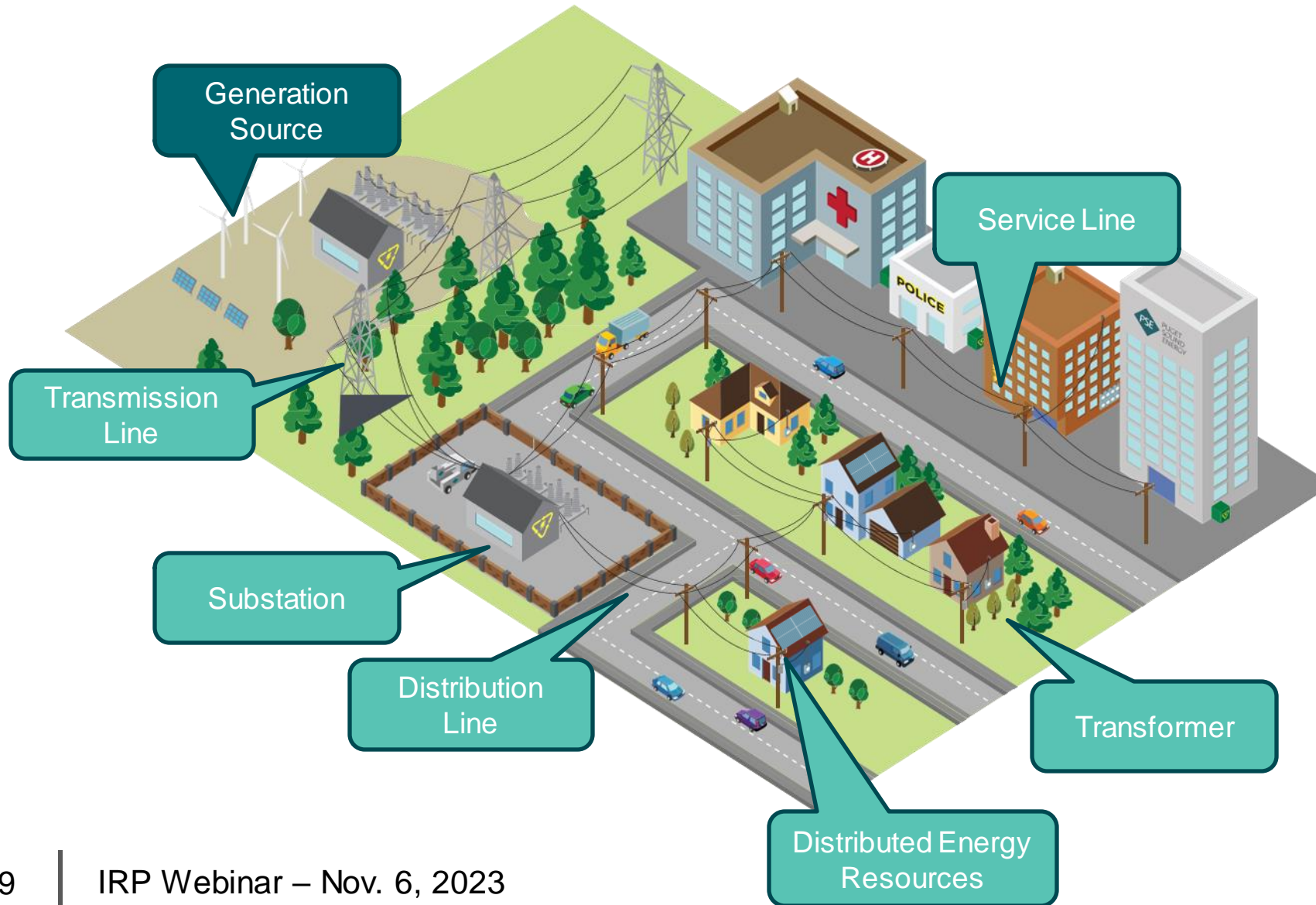
# Overview of Delivery System Planning

November 6, 2023

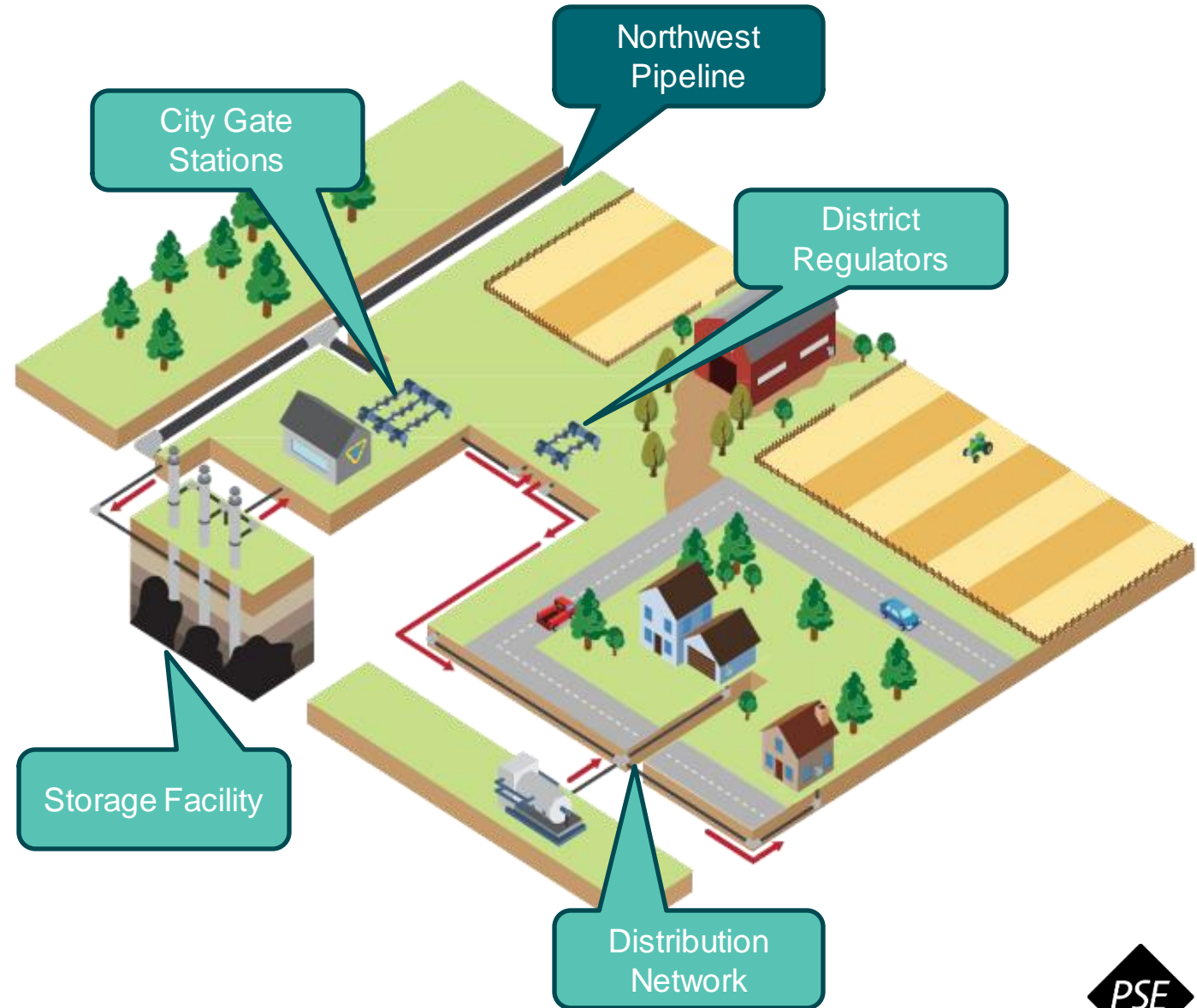




# Energy Delivery System - Electric



# Energy Delivery System – Natural Gas



# Delivery System Planning Process

The delivery system planning process requires many robust capabilities across PSE

## Planning Triggers

- Safety & health
- Equity advancement
- Customer requests
- Load growth
- Grid modernization
- Gas modernization
- Asset health management
- Asset reliability and integrity
- Compliance with regulation
- Resource integration

- Intake of customer and community input
- Forecasting new customer growth, load changes from climate and electrification
- Monitoring and adaption to new regulations and policy
- System simulation and modeling (normal operation + contingencies)
- Analysis of resource integration
- Benefit and cost analysis
- Project portfolio optimization

System Evaluation

System needs, modeling, & analysis

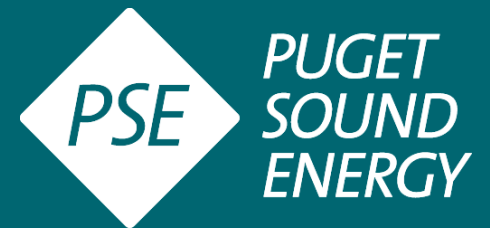
Alternatives & recommended solution

Optimize with other projects

Final Plan: portfolio of projects

# Delivery System Planning and the Integrated Resource Plan

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# PSE's IRP and Delivery System Planning are closely linked

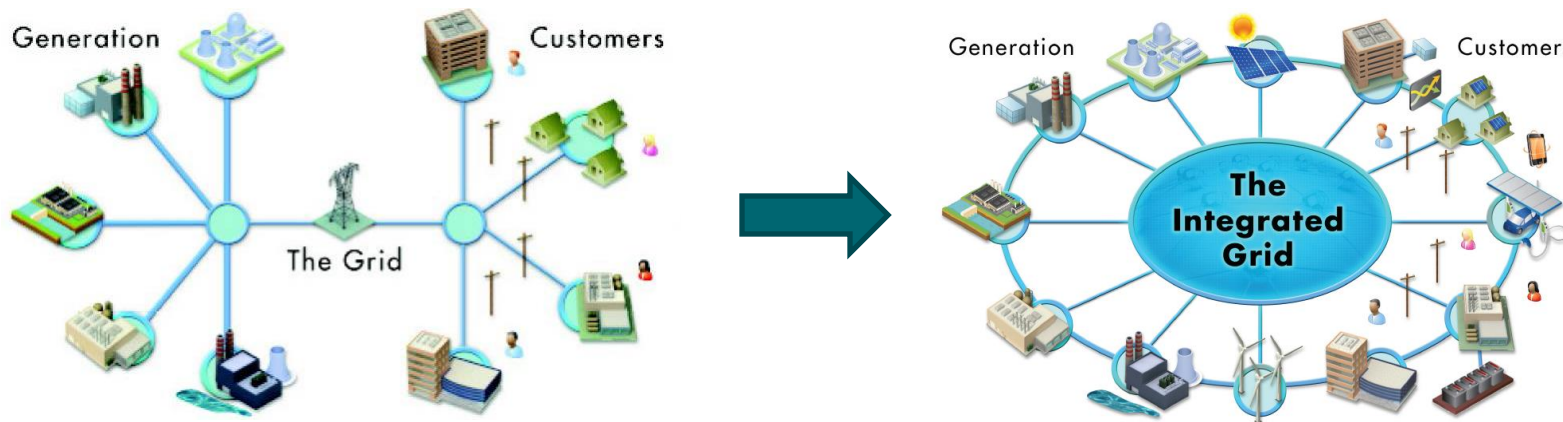
## Integrated Resource Planning (IRP)

optimizes resource selections to satisfy energy needs of customers

## Delivery System Planning (DSP)

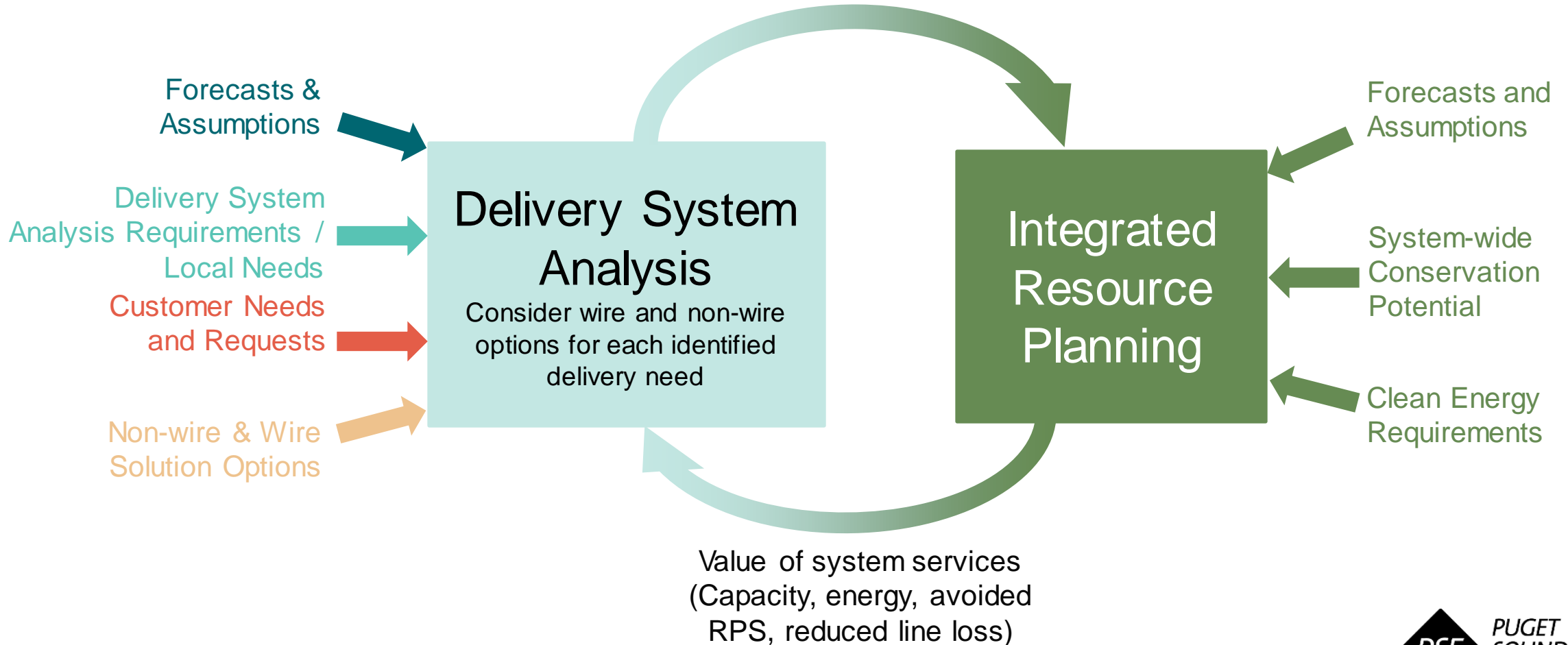
ensures the energy delivery system reliably receives and delivers energy where needed

The energy delivery system is being transformed from a one-way delivery system to an integrator of large generation and local resources:



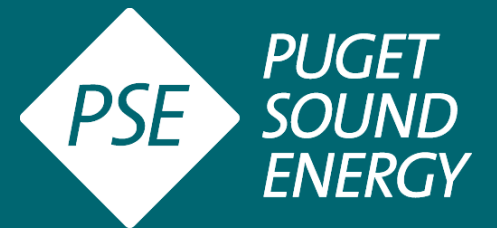
# Delivery System Planning and IRP process integration is evolving to support the transformation

Value of avoided T&D (incremental and new capacity)  
Non-wire alternatives forecast with DERs and storage



# Enabling tools

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# Technical Tools and Systems for Distributed Energy Resources Planning and Operational Enablement



Customer/Utility Interface



Operational Platforms



Planning Analysis



*Meter Data Visibility*

*Hosting Capacity Map*

*Interconnection Portal*

*ADMS*

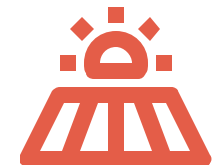
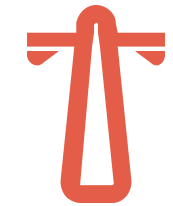
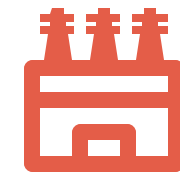
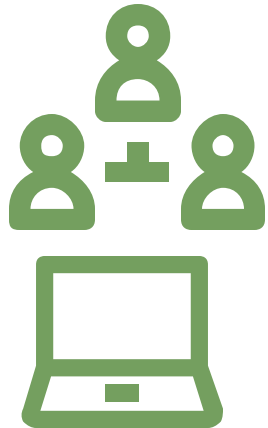
*Virtual Power Plant*

*DERMS*

*Non-Wires Alternatives*

*Hosting Capacity Analysis*

*Geospatial Load Forecasting*



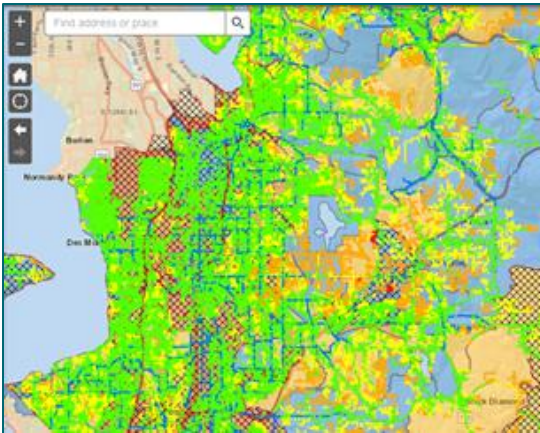


# Key Considerations in Energy Delivery System Project Portfolio Optimization

Equity Advancement



Local / Community Needs



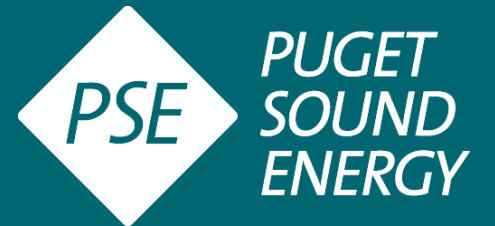
## Benefit-Cost Analysis

	PROJECT COST	RELIABILITY BENEFIT	CUSTOMER IMPACT	OPERATIONAL FLEXIBILITY
UNDERGROUND CONVERSION	\$\$	🔌🔌🔌	👤👤👤	🔧
TREEWIRE / DA / NEW FEEDER TIE	\$	🔌🔌	👤👤👤	🔧🔧🔧
LOCALIZED GENERATOR	\$\$\$	🔌🔌	👤👤	🔧🔧
LOCALIZED BATTERY	\$\$\$	🔌	👤👤	🔧🔧

With input from the Equity Advisory Group, in 2023 PSE enhanced our investment decision optimization process to include equity target parameters

# Additional considerations

November 6, 2023



# Expanding Engagement

2023

- Received input regarding equity and equitable distribution of benefits and incorporated into planning process
- Developed initial equity integration approach for Delivery System Planning investment decisions and utilized in optimizing the 2025 and 2026 project portfolios
- Piloted local community engagement for delivery system planning work

2024

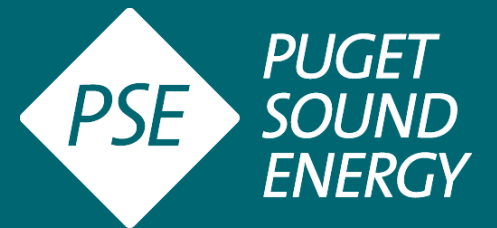
- Expand public and community engagement efforts based on pilot learnings
- Refine investment decision optimization utilizing new definitions, CBIs, and tools
- Expand coordination of planning processes by further integrating with the IRP to guide resource decisions that may benefit the energy delivery system

2025

- Incorporate Distributional Equity Analysis pilot into decision making process
- Continue to mature community engagement practices in delivery system planning by responding to feedback from participants and evaluation of outcomes

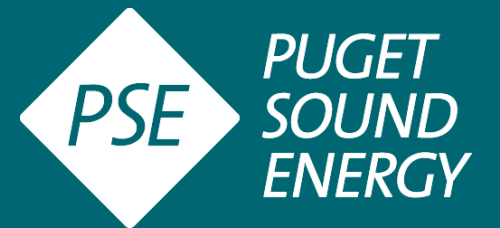
# Poll and Q&A

Please add your questions to the Q&A box



# Next steps

November 6, 2023



# Next steps

- **November 13, 2023** Feedback form for DSP webinar closes
- **November 15, 2023** Energy Efficiency and Demand-side Resources public webinar
- **December 7, 2023** Emerging Resources: Hydrogen public webinar

# Public comment opportunity

Please raise your “hand” if you would like to make a comment

