Equity Advisory Group Meeting

November 13, 2023

5 p.m. – 7 p.m.

PSE PUGET SOUND ENERGY

Welcome and Introductions

Rose McKinney-James

Facilitator

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YouTube livestream and Public Comment for observers

Public Comment

- The public comment period will start at 7:00 p.m.
- Instructions to join will be presented during break.
- **Please do not join the meeting until then.** The first 5 individuals will have 2 minutes each to speak.

Livestream

- Observers can watch the meeting through the YouTube livestream link.
- Prepare to provide your verbal comments during the observer comment period on the agenda.

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Facilitator requests

Participants, please:

- Listen to and appreciate the diversity of views and opinions
- Actively participate in the group
- Behave constructively and courteously towards all participants
- Respect the role of the facilitator to guide the group process

Observers, please:

- Respect the Joint Advisory Group's time to discuss meeting topics

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Safety Moment

Amy Nichols

EAG Member

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Filter through your filters!

- HVAC filters grow bacteria, mold, dust
- Dirty filters increase risk of fire
- Follow manufacturer advice, change more often in the summer
- Merv 14+ recommended

- Activated charcoal can hold bacteria and mold
- An old filter can be more harmful than tap
- Change your filter every 3 months

The inside of a brita filter, via Brita.com

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Equity Moment

Troy Hutson

Director, Energy Equity

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Energy Justice

Recognition

Requires an understanding of historic and ongoing inequalities and prescribes efforts that seek to reconcile these inequalities

Restorative

Utilizes regulatory government organizations or other interventions to disrupt and address distributional, recognitional or procedural injustices and to correct them through laws, rules, policies, orders and practices.

Procedural

Focuses on inclusive decision-making processes and seeks to ensure that proceedings are fair, equitable, and inclusive for participants, recognizing that marginalized and vulnerable populations have been excluded from decision-making process

Distributional

Distribution of benefits and burdens across populations. Aims to ensure marginalized and vulnerable populations do not receive inordinate share of the burdens or are denied access to benefits

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Agenda

5:00 p.m. – Welcome

5:05 p.m. – PSE and EAG Updates

5:25 p.m. – Non-Energy Impacts Energy Equity Update

6:10 p.m. – BREAK

6:15 p.m. – Delivery System Planning

6:35 p.m. – Energy Equity Update

6:55 p.m. – Next steps

7:00 p.m. – Public Comment

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Objectives

- Receive relevant updates from PSE and EAG committees
- Reflect on progress integrating EAG feedback into Delivery System Planning
- Learn more about non-energy impacts
- Receive Energy Equity update

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PSE and EAG Updates

Kara Durbin

Director, Clean Energy Strategy

Ray Outlaw

Manager Communications Initiatives, Clean Energy Strategy

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2023 Biennial CEIP Update

2023 Biennial Update

- **Formally submitted on Nov. 1, 2023**
- Commission public comment period to follow **(we will keep you updated)**
- Commission review and approval process **(we will keep you updated)**

Looking ahead to 2024

- Continue addressing Commission conditions
- Continue clean energy resource acquisition
- Continue refining existing and developing new programs
- Continue and advance equity efforts
- Develop 2025 CEIP (2026-29)

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Steering Committee updates

- Provide 2022 end of year feedback to each member
- More detailed end of year data
- Improved feedback loop regarding topics and progress

Looking ahead

- Scheduling end of year check-ins
- Developing workplan for 2024

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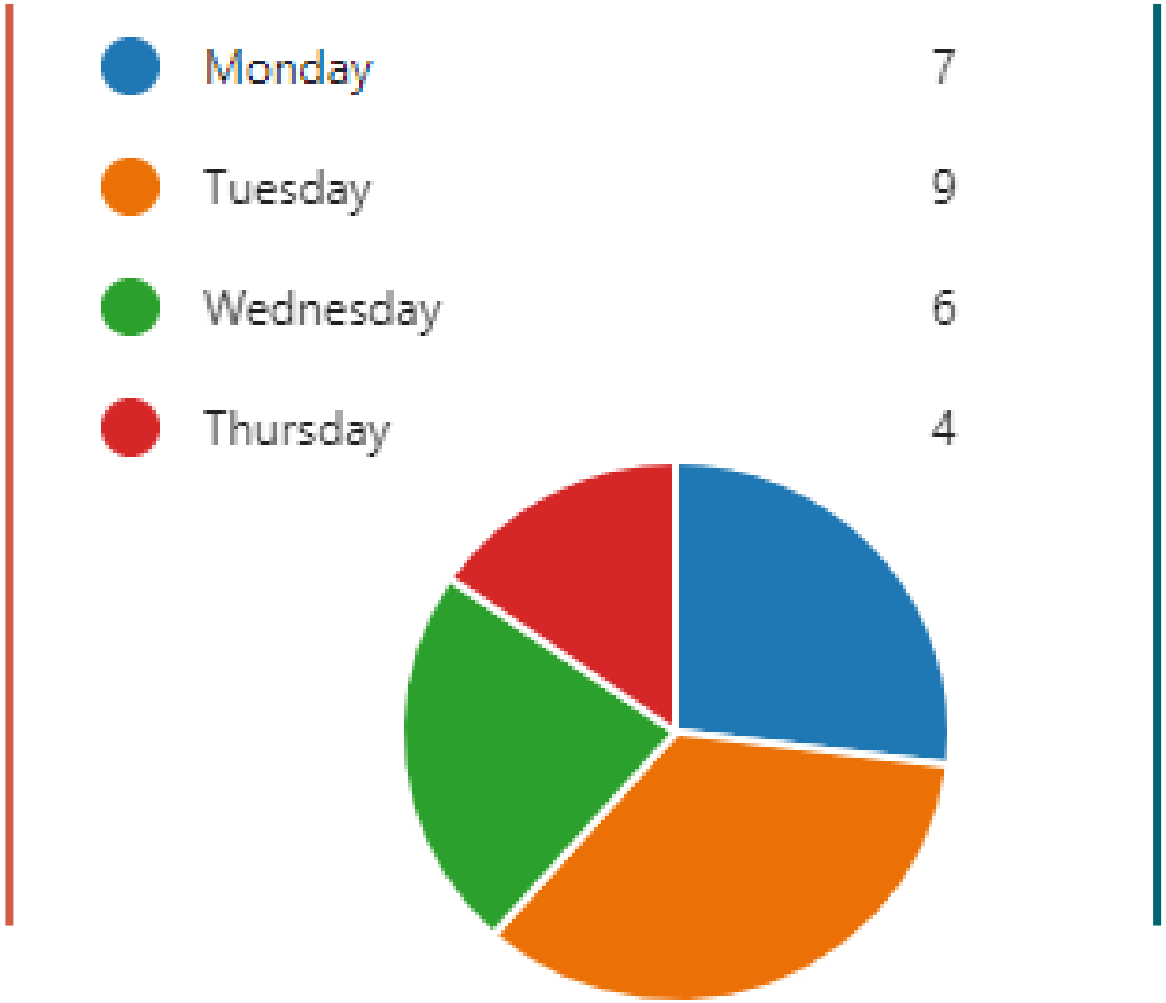
2024 Meeting Poll and Dates



2024 meeting dates:

- Tuesday, January 16, 2024
- Tuesday, February 20, 2024
- Tuesday, March 19, 2024
- Tuesday, May 21, 2024
- Tuesday, June 18, 2024
- Tuesday, July 16, 2024
- Tuesday, September 17, 2024
- Tuesday, October 15, 2024
- Tuesday, November 19, 2024

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Non-Energy Impacts

Kasey Curtis
Senior Market Analyst

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Non-Energy Impacts

In 2019, the WUTC added conditions to PSE's two-year conservation plan:

Puget Sound Energy must demonstrate progress towards identifying, researching, and developing a plan to properly value nonenergy impacts that have not previously been quantified.

Equitable Distribution of Nonenergy Benefits

a) During this biennium, Puget Sound Energy must demonstrate progress towards identifying, researching, and developing a plan to properly value nonenergy impacts that have not previously been quantified. The nonenergy impacts considered must include the costs and risks of long-term and short-term public health benefits, environmental benefits, energy security, and other applicable nonenergy impacts. These impacts and risks must be included in the 2022-2023 Biennial Conservation Plan.

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Non-Energy Impacts and EAG

In 2022, the WUTC added conditions related to engaging advisory groups:

11) Equitable Distribution of Nonenergy Benefits

a) During this biennium, PSE must continue to demonstrate progress towards identifying, researching, and properly valuing nonenergy impacts. The nonenergy impacts considered must include the costs and risks of long-term and short-term public health benefits, environmental benefits, energy security, and other applicable nonenergy impacts. In consultation with the Company's conservation, equity, and resource planning advisory groups, nonenergy impacts and risks must be included in the next Biennial Conservation Plan and Conservation Potential Assessment.

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What are Non-Energy Impacts?

Non-Energy Impacts (NEIs) are the quantified costs or benefits of energy efficiency that are not already accounted for in avoided energy costs

Avoided energy costs (examples)

- Energy cost savings
- Capacity cost savings
- Transmission and distribution benefits
- Greenhouse gas savings

Non-energy benefits (examples)

- Reduced air pollution
- Water savings
- Increased comfort
- Reduced customer arrears

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Non-Energy Impacts - Example

Example			
Program	**Measure**	**Avoided energy costs**	**Non-energy benefits**
Weatherization	Air sealing	Reduced heating loss ↓ Reduced heating load ↓ Lower energy costs	• Improved comfort • Reduced noise • Reduced secondary heating • Improved system Performance • Reduced air infiltration

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How are NEIs used?

Total Resource Cost Test

$$\frac{\textit{Benefits}}{\textit{Costs}} \geq 1$$

The sum of all *lifetime* benefits of our Energy Efficiency portfolio must be greater than or equal to the cost.

$$\textbf{Total Resource Cost Test} = \sum \frac{\textit{Benefits}}{\textit{Costs}} = \frac{\text{Avoided Energy Costs} + \text{Non-Energy Impacts}}{\text{Customer Measure Costs}\ \text{Program Administration Costs}}$$

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Example

An energy efficiency project costs $1000 dollars to implement. It will save $150 per year in energy costs and provide $40 per year in water savings. Expected life is 10 years.

$$\frac{\textbf{Benefits}}{\textbf{Costs}} = \frac{\$150/\text{Year (10 Year Life)} + \$40 \text{ Water Savings (}\textbf{NEI}\text{)}}{\$1000 \text{ Equipment \& Installation} + \$150 \text{ PSE Administration Costs}} = \frac{\text{Year 1 dollars (net present value)}}{\$1{,}150} = \frac{\$1{,}412}{\$1{,}150} = \text{Total Resource Cost (TRC) Score } 1.23$$

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Example without NEI

An energy efficiency project costs $1000 dollars to implement. It will save $150 per year in energy costs ~~and provide $40 per year in water savings.~~ Expected life is 10 years.

$$\frac{\textbf{Benefits}}{\textbf{Costs}} = \frac{\$150/\text{Year (10 Year Life)}}{\$1000\ \text{Equipment \& Installation} + \$150\ \text{PSE Administration Costs}} = \frac{\$1{,}115}{\$1{,}150} = 0.97$$

Year 1 dollars (net present value)

TRC Score

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How are NEIs calculated?

NEIs are calculated (or estimated) in a number of different ways:

Direct measurement

Example: A new dishwasher saves energy *and* water.

Water Savings = gal/yr reduced x local water/sewer rates

Modeling

Example: Weatherization reduces reliance on wood fuels

Wood fuels = reduction in air pollutants

Reduced pollutants can be modeled to assess health effects using existing risk assessment tools

Surveys

Example: LED lighting improves lighting quality

Survey Population receiving benefit

Ranked-choice preference survey

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PSE's 2021 NEI Project

- 2021: PSE, Avista & Pacificorp partnered in NEI research
- Resulted in database of NEIs; approximately 780 new measures (see appendix slide 49 for details)

Example NEI categories

- Thermal Comfort
- Property Value
- Utility Service Calls
- Health and Safety
- Fire/Insurance Damage
- Product Spoilage/Defects
- O&M Savings
- Bad debt/Write-offs
- Productivity

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Additional statewide efforts

In 2022, the WUTC convened a Cost Effectiveness working group (Docket #210804) with the **goal** to:

- Align cost-effectiveness tests across all distributed energy resources, including EE, distributed generation, EVs, etc
- **Adopt a Washington-specific cost test** which incorporates all known NEI benefits within the framework of the NSPM
- Incorporate the distributional effects of all energy benefits and costs
- Work is ongoing

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Challenges of NEIs

- Some NEIs are negative (*example: operations and maintenance costs increase with control systems)*
- NEIs can be difficult to quantify
  - Simple: water savings, air pollutant reductions
  - Complex: increased resilience, decreased risk, increased reliability
- Subjectivity in impact and cost
- Costs of research compared to impact on CE
- Allocation of impacts across disparate populations

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Recap

- Non-Energy Impacts (NEIs) are the quantified costs or benefits of energy efficiency that are not already accounted for in avoided energy costs
- Commission directed PSE to include NEIs and known risks in our conservation planning
- NEIs help utilities account for the full costs and benefits of programs
- NEIs can be challenging to measure
- Work is ongoing to incorporate NEIs into our processes

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Discussion questions

- Thinking about equity and your guiding principles of accountability, accessibility, and affordability, do you see risks or have initial concerns with this concept or implementation of NEIs?

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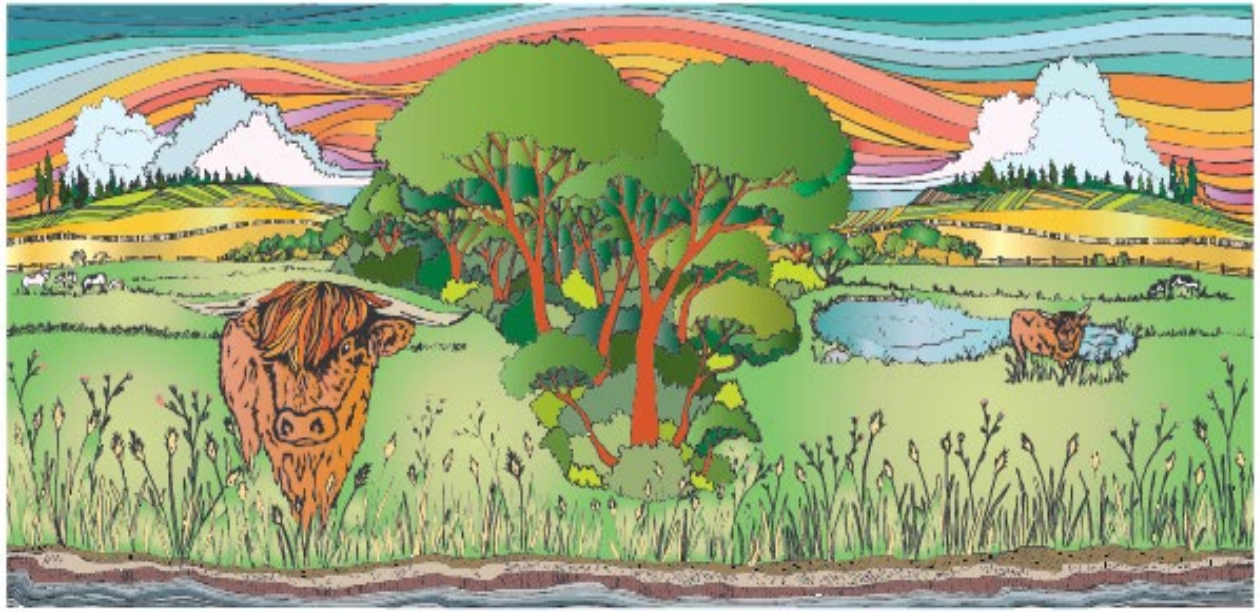
Break

Please return at 6:00 pm



“Farmscapes” by Tia Savedo of Whidbey Island, WA

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    a) Visit *https://zoom.us/join*
    b) Insert Meeting ID: _____
2. Call in to the meeting:
    a) Call number:+1 253 215 8782
    a) Insert Meeting ID: _____

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Delivery System Planning - Equity Update

Niecie Weatherby, Manager Gas System Integrity

Corey Corbett, Manager Operations Rate Plan Performance

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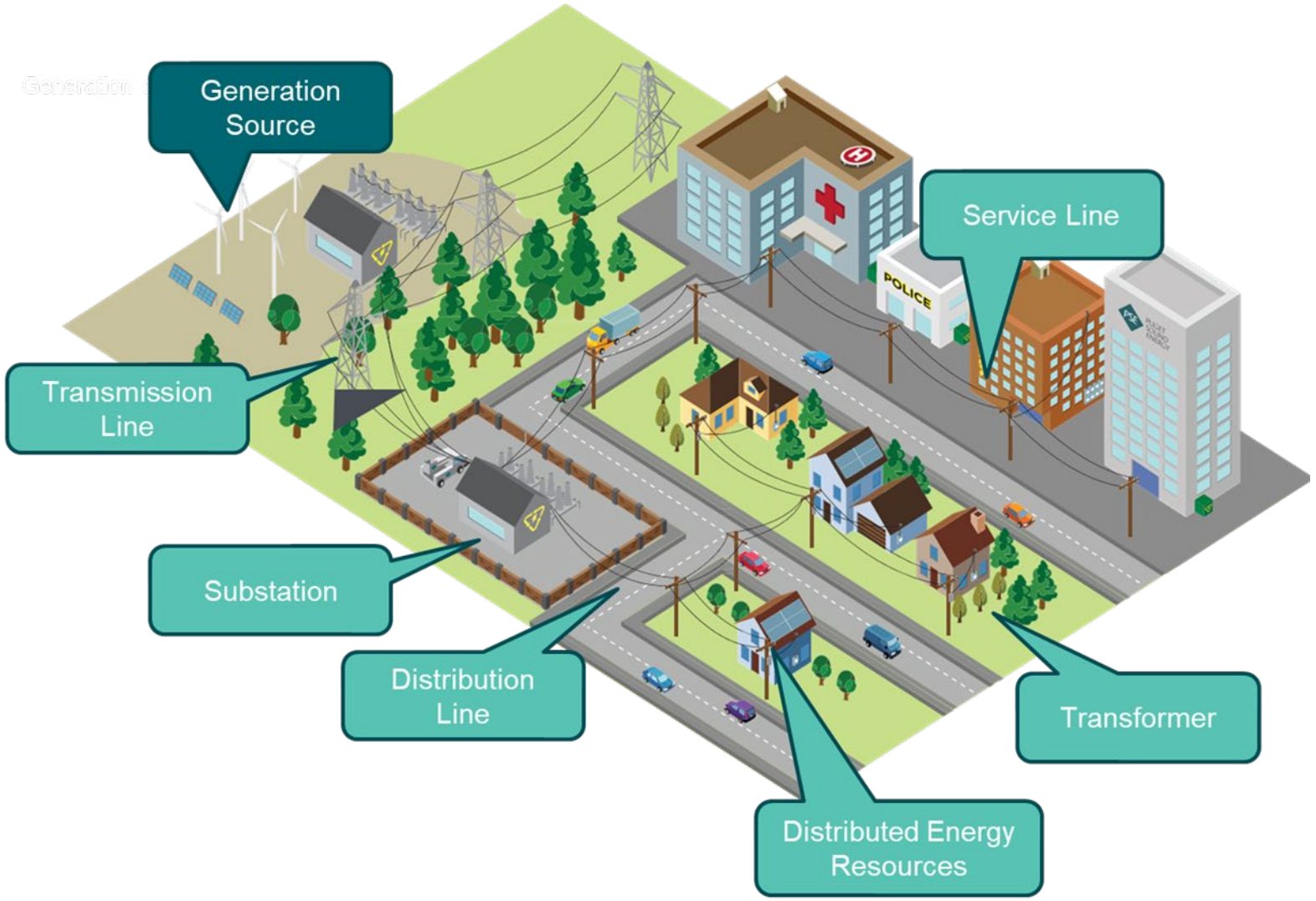
Energy Delivery System



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Previous Engagements With the EAG

- 2022 General Rate Case Condition 26
  - Engage with the EAG and others to develop new benefits and costs for PSE's investment decision tool for delivery system planning
- Follow-up on previous engagements with the EAG
  - November 14, 2022
  - March 20, 2023
- Provide update on how EAG feedback has been incorporated

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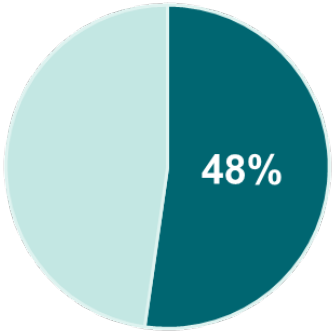
Incorporating Equity into Benefit Cost Analysis



2025 Electric Portfolio

48% of funded electric projects provide benefit to named communities

What we learned:

- Clarity on application of benefits for equity advancement
- Projects should directly benefit communities where they are constructed
- Portfolio selection should achieve desired targets for equity advancement

How we applied it:

- Calculated equity benefit only for projects in a program that directly impacted the named community
- Assessed equity separate from benefit cost analysis to ensure achievement of desired targets
- Evaluated the number of benefits for all programs

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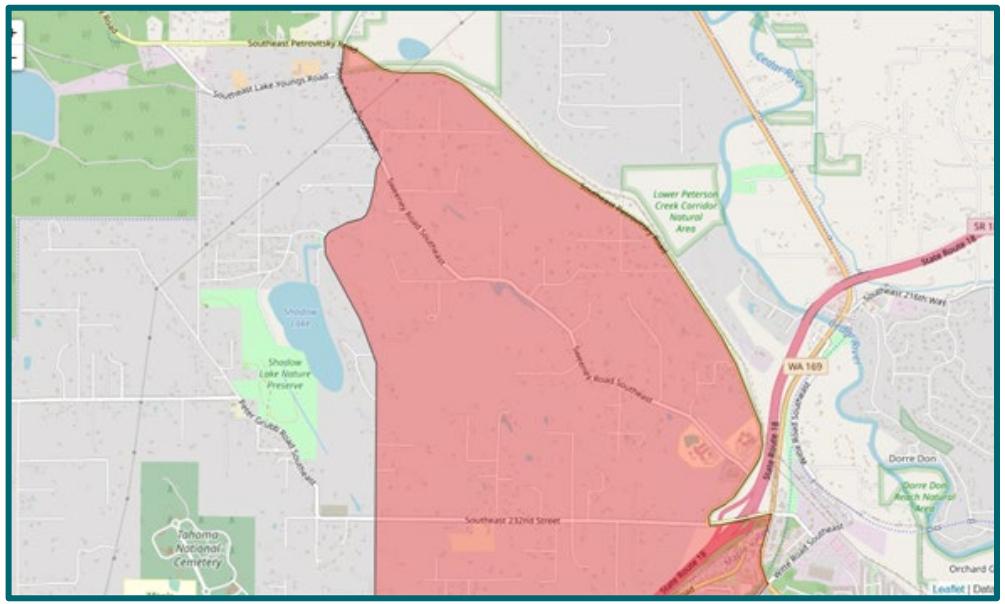
Piloting Community Engagement Framework

Piloting a customer engagement framework to better understand the impacts and customer energy burdens from power outages in the Lake Youngs area to inform the needs for a distribution reliability project.



- Start with online survey and postcards
- Meet with community for input on options
- Incorporate feedback into project needs

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Next Steps

2023

- Continue community engagement and refinement of the process

2024

- Update our process with latest energy equity data
- Continue to evolve public and community engagement methodology to support delivery system planning
- Develop 2027 portfolio of projects

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Energy Equity Update

Troy Hutson
Director Energy Equity

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Background into key equity framework insights from the UTC

Expansion of the public interest standard to include equity:

"The equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health, economic, and environmental benefits and the reduction of costs and risks; and energy security and resiliency. In achieving these policies, there should not be an increase in environmental health impacts to highly impacted communities."

(PSE GRC Order UE-220066, UG 220067 & UG 210918)

Overarching expectation:

Recognizing that no action is equity-neutral, regulated companies should inquire whether each proposed modification to their rates, practices, or operations corrects or perpetuates inequities. Companies likewise should be prepared to provide testimony and evidence to support their position.

(Cascade Natural Gas GRC UG-210755)

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Regulatory

Clean Energy Transformation Act (CETA)
PSE's Clean Energy Implementation Plan (CEIP)

Goals and targets

2025	• Coal-free electricity • Achieve annual 60% clean electricity goal
2030	• Carbon-neutral electric system
2045	• 100% clean electricity

PSE's General Rate Case (GRC) Order

- Distributional Equity Analysis (DEA)
- Corporate Capital Planning
- Delivery System Planning
- Performance Metrics
- Affordability – bill discount rate, arrearage management plan, increased bill assistance
- Clean energy/energy management program participation and distribution
  - Targeted electrification pilot

Infrastructure Investment and Jobs Act (IIJA) - Federal

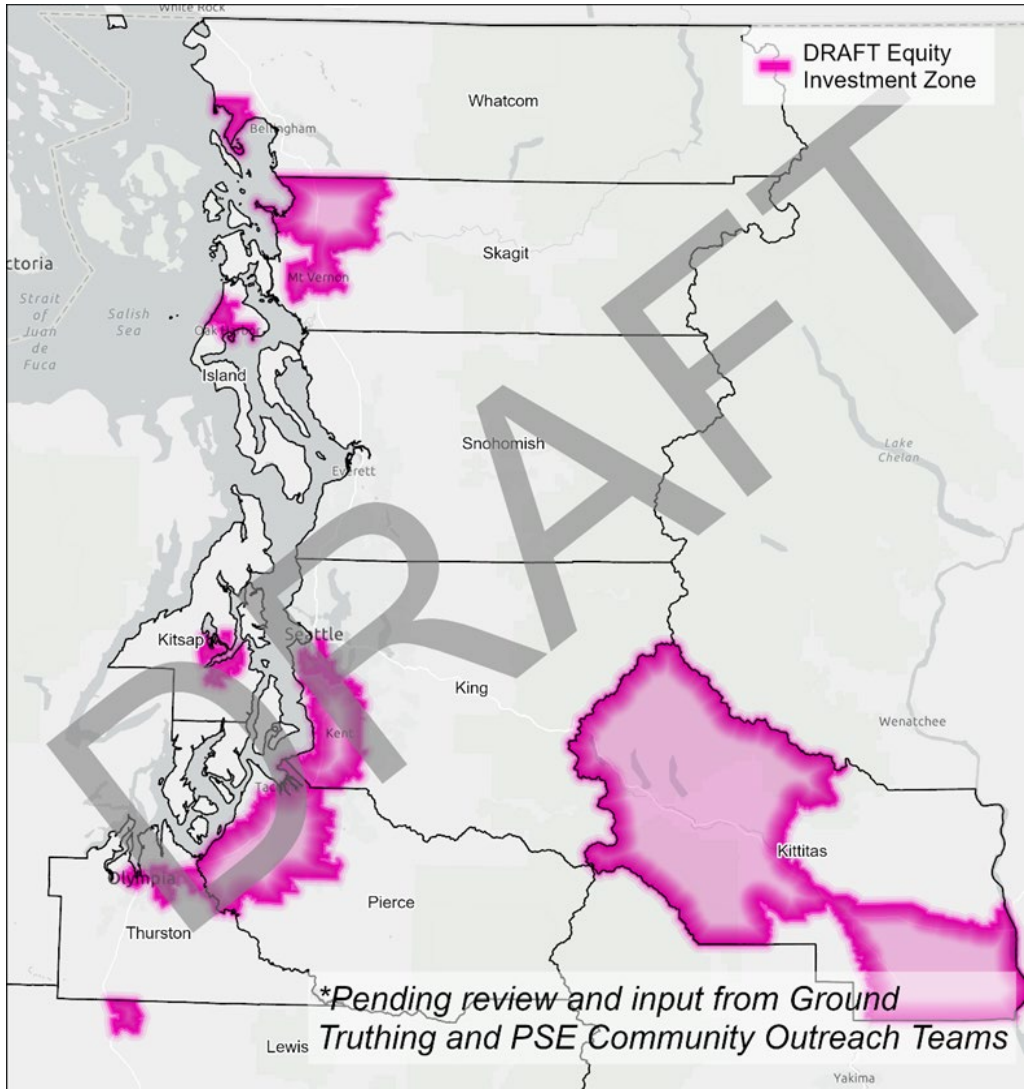
Healthy Environment for All (HEAL) Act - Washington

Climate Commitment Act (CCA) - Washington

Equity Analysis – Substation Security

- **Developed a plan to secure manual operators on electrical equipment with locks in all substations**
- **Prioritized substations that serve named communities ranking all substations based on Highly Impacted Communities and Vulnerable Populations – High**

Equity Investment Zones



- **Prioritize disadvantaged communities**
- **Concerted effort**
- **UW CHanGE**
- **US Forest Service**
- **UW Civil Rights and Labor History Consortium**

Community Engagement

Approach

- Partnerships
- CBOs
- Advisory Groups
- Interested Parties
- WUTC & Staff
- WA Ethnic Commissions

- Clean Energy Benefits

Key Outcomes

- Distributed to Named Communities
- Expedite distribution to Equity Investment Zones

Approach

- IAP2 Aspiration
- Develop an Engagement Guide
- Internal alignment with engagement

- Aspire to reach Empowerment level

Proposed Measures (in development)
outreach events
community organizations reached
priority customers engaged at the Empowerment spectrum level

Key Outcomes

- Meaningful community collaboration
- Resulting in clean energy projects

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Distribution of Benefits & Reduction of Burdens

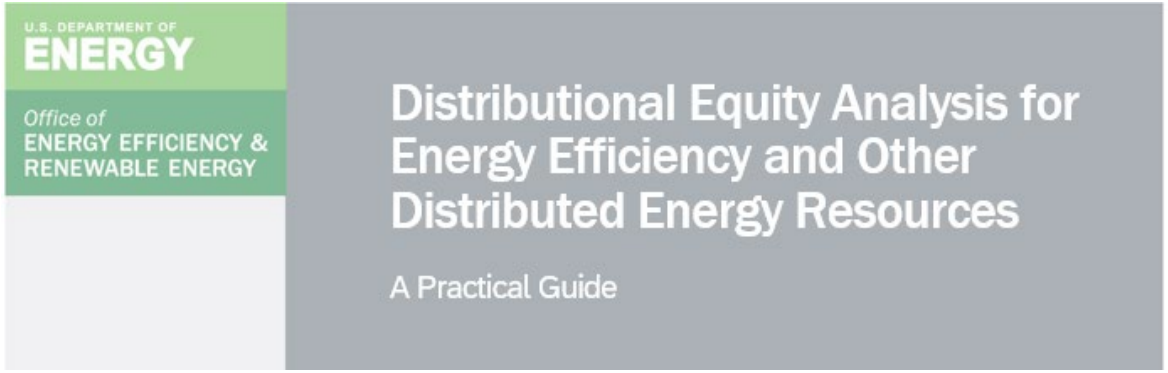
Justice40

CEIP

CCA

Proposed Measures[1]

- % participation
- % energy benefits (Energy Efficiency, Demand Response)
- % energy benefits (Distributed Energy Resources)
- % energy benefits (Targeted Electrification)
- % energy benefits (Capital Portfolio)
- Energy assistance $ distribution, # % participation
- Speed of project implementation in Priority Populations



DEA Practical Guide by Lawrence Berkeley National Laboratory & Synapse Energy Economics

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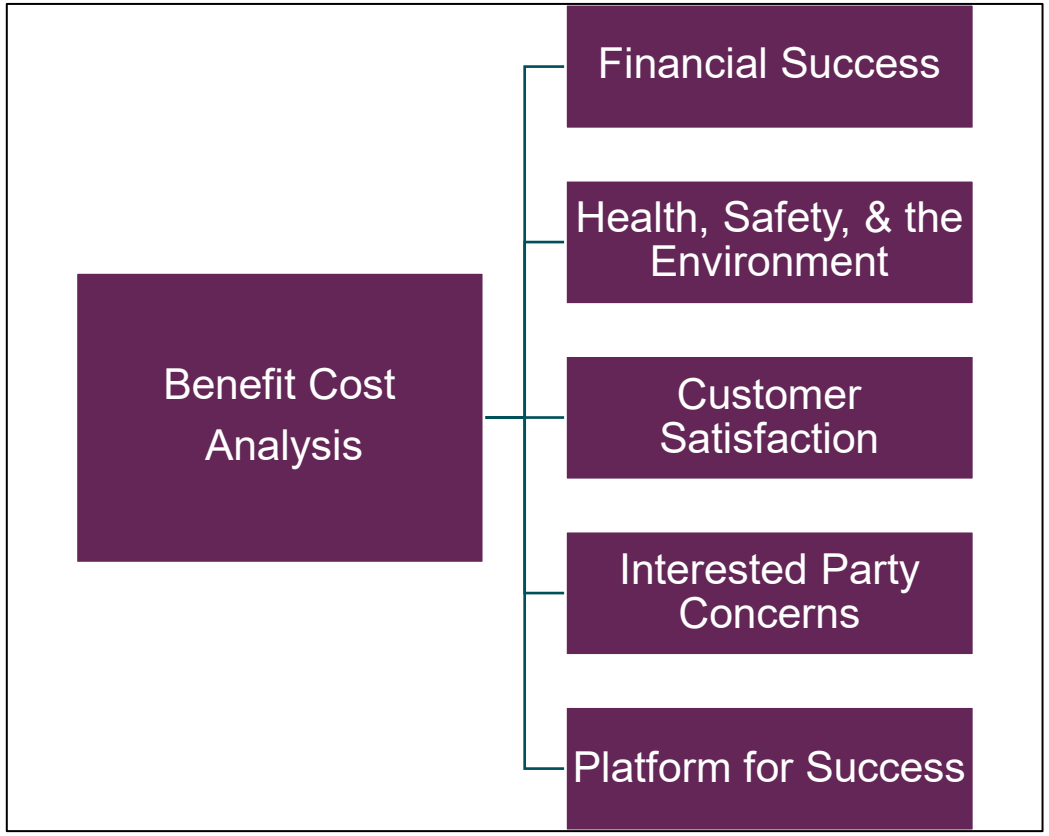
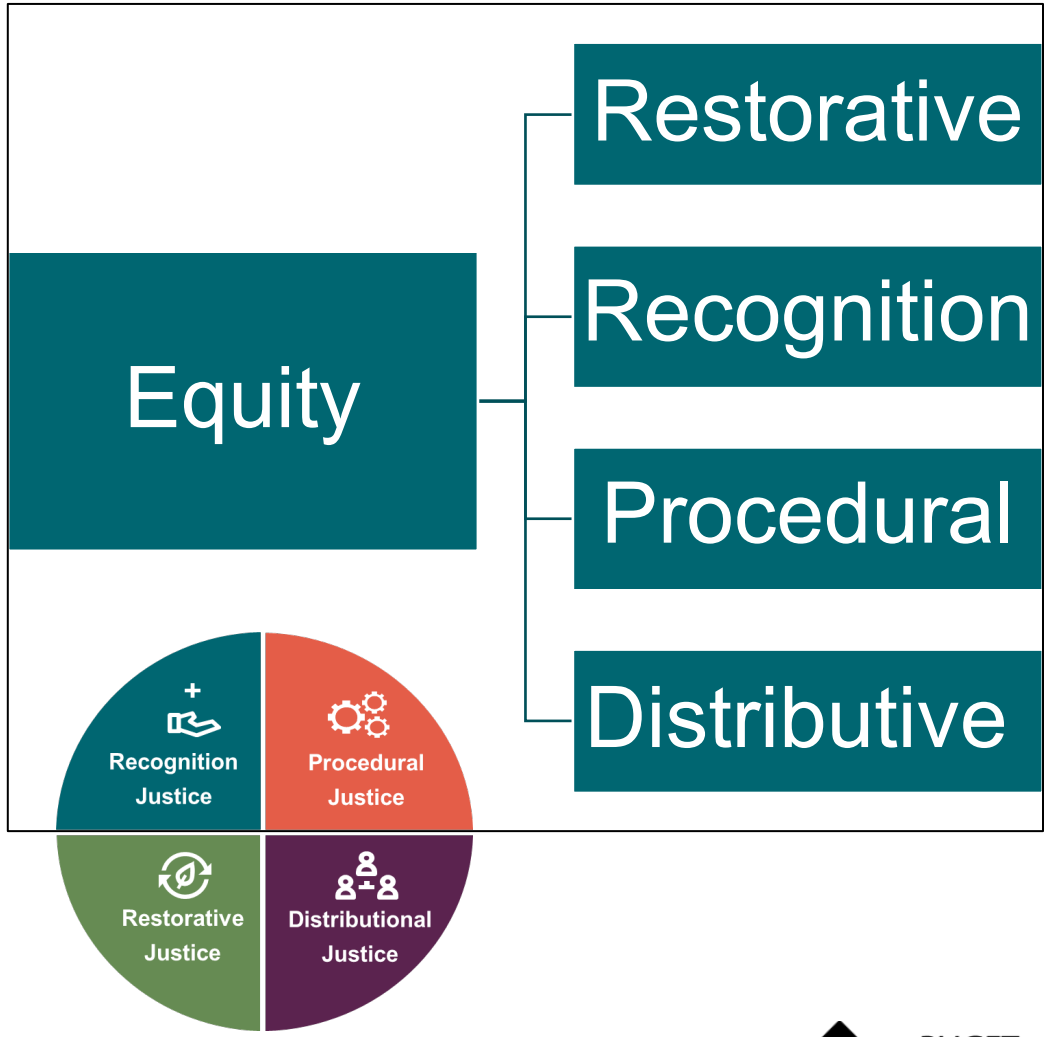
Incorporating Equity and Benefit Cost Analysis





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Questions?

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Upcoming Meetings

- **End of year conversations with individual members**
- **No formal group meetings in December**
- **Look for invites for 2024 soon!**

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Public comment period

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Public comment – how to join

The first five individuals will each have 2 minutes to speak.

There are two ways to join.

Option 1: Join the Zoom meeting

a) Visit https://zoom.us/join

b) Insert Meeting ID: _____

Option 2: Call-in by phone

a) Call number: +1 253 215 8782

b) Insert Meeting ID: _____

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Appendix

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NEI Reporting Name	Sector	NEI Type	Definition
Administrative costs	C&I	Participant	Participant reported avoided overhead costs associated with invoice processing, parts/supplies procurement, contractor coordination, and customer complaints.
Avoided Illness From Air Pollution	C&I	Societal	Modeled value of avoided particulate matter 2.5 microns or less (PM2.5) from electric power generation associated with electricity generation at power plant. Does not Includes carbon dioxide.
Ease Of Selling Or Leasing	C&I	Participant	Participant reported improved ability to sell or lease property due to increased performance and desirability.
Fires/insurance damage	C&I	Participant	Avoided cost of fires based on insurance estimates
Lighting Quality And Lifetime	C&I	Participant	Participant reported value of improved lighting lumen levels, color, and steadiness.
O&M	C&I	Participant	Avoided time and costs associated with reduced maintenance, parts/repairs, service visits, and system monitoring
Other Impacts	C&I	Participant	Includes rent revenues, employee satisfaction, and other labor costs (defined as other labor at the company not covered in O&M, administrative costs, supplies and materials). Included modeled value of decreased usage of fuel, propane, and other sources.
Product Spoilage/Defects	C&I	Participant	Participant reported value of avoided product losses (e.g. reduced food spoilage in grocery stores).
Productivity	C&I	Participant	Participant reported value of improved workplace productivity resulting from improved rest and sleep related to improved living conditions.
Sales Revenue	C&I	Participant	Participant reported increased sales resulting from improved product.
Supplies and materials	C&I	Participant	Includes changes in the type, amount, or costs of materials, and supplies needed
Thermal Comfort	C&I	Participant	Increased comfort due to fewer drafts and even temperatures throughout the building.
Waste disposal	C&I	Participant	Participant reported costs to remove solid waste and landfill fees (e.g.: fees to dispose of CFLs).
Water/Wastewater	C&I	Participant	Reduced water usage due to efficient equipment.
Avoided Illness From Air Pollution	Residential	Societal	Modeled value of avoided particulate matter 2.5 microns or less (PM2.5) associated with electricity generation at power plant. Does not include carbon dioxide.
Bad Debt Write Offs	Residential	Utility	Reduction in cases of bad debt write offs
Calls to utility	Residential	Utility	Reduction in number of calls to utility from customers
Carrying Cost On Arrearages	Residential	Utility	Reduced carrying cost on arrearages
Ease Of Selling Or Leasing	Residential	Participant	Participant reported improved ability to sell or lease property due to increased performance and desirability.
Fires/insurance damage	Residential	Participant	Avoided cost of fires based on insurance estimates
Health and safety	Residential	Participant	Participant reported costs from time off and lost pay due to fewer missed days of work/school, heat/cold stress, etc., resulting from measures installed in the home.
Lighting Quality And Lifetime	Residential	Participant	Participant reported value of improved lighting lumen levels, color, and steadiness.
Noise	Residential	Participant	Participant reported value associated with reduced amount of outside noise that can be heard inside the home.
O&M	Residential	Participant	Modeled avoided time and costs associated with reduced maintenance, parts/repairs, service visits, and system monitoring
Other Impacts	Residential	Participant	Includes participant impacts not covered in the other categories such as reduced tenant turnover.
Other Impacts	Residential	Utility	Includes rate discounts and price hedging. Includes low income subsidies avoided.
Productivity	Residential	Participant	Participant reported value resulting from improved rest, sleep, and living conditions associated with energy efficiency improvements.
Thermal Comfort	Residential	Participant	Increased comfort due to fewer drafts and even temperatures throughout the building.