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Considering Equity in Clean Energy Planning

UM 2225 – Community Benefits and Impacts Workshop #1

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Examples of Equity in Clean Energy Policy

- **Michigan**: 2020 Executive Order requires PUC to expand its environmental review of IRPs to evaluate whether utilities are meeting state decarbonization goals and consider environmental justice and health impacts

- **Washington**: 2019 Clean Energy Transformation Act requires IRPs to include an assessment of energy and non-energy benefits and reductions of burdens to vulnerable populations

- **Connecticut**: 2019 Executive Order requires the Public Utilities Regulatory Authority to analyze decarbonization pathways consistent w/ the state's goal of 100% carbon-free electricity by 2040 and ensure energy affordability and equity for all ratepayers during the resource planning process (but this is loosely outlined)

- **California**: 2018 CPUC decision requires IRPs with LSEs to assess their impacts on disadvantaged communities

Source: PNNL Advancing Energy Equity in Grid Planning, https://netl.doe.gov/sites/default/files/netl-file/Advancing%20Energy%20Equity%20in%20Grid%20Planning.pdf

Defining Energy Equity

Equity is just and fair inclusion, and ***energy equity*** is the fair distribution of the benefits and burdens of energy production and consumption. (Partnership for Southern Equity)

Energy equity recognizes that disadvantaged communities have been historically marginalized and overburdened by pollution, underinvestment in clean energy infrastructure, and lack of access to energy-efficient housing and transportation. **An equitable energy system is one where the economic, health, and social benefits of participation extend to all levels of society, regardless of ability, race, or socioeconomic status. Achieving energy equity requires intentionally designing systems, technology, procedures, and policies that lead to the fair and just distribution of benefits in the energy system.**(PNNL)

Four Dimensions of Energy Equity

How Can We Achieve an Equitable Energy System?

Structural

Decisions made with recognition of historical, cultural and institutional dynamics and structures that resulted in disparities

Procedural

Inclusive, accessible, authentic engagement and representation in processes to develop or implement programs and policies

Distributional

Programs and policies result in fair distributions of benefits and burdens across all segments of a community, prioritizing those with highest need

Trans-generational

Decisions consider generational impacts and don't result in unfair burdens on future generations

Source: Adapted from the Urban Sustainability Directors Network's 2014 report written by A.Park, Equity in Sustainability: An Equity Scan of Local Government Sustainability Programs

Connections to Energy Planning

Structural/Restorative	Recognition in assumptions, tools, methods of planning that have resulted in disparities
Procedural	Expanding access, transparency, inclusion, input in planning processes
Distributional	Design of clean energy programs, rates, project siting, etc.
Intergenerational	Future customers impacted by compounding effects of today's decisions

Defining Equitable Outcomes

Understanding the inequities

- Energy burden
- Disconnections
- Limited participation in programs
- Service reliability

Understanding where inequities exist and why

- Identification of Target Population
  - Disadvantaged / highly vulnerable communities, income level, rural communities, tribal communities… varies by jurisdiction, utility service territory, community
  - Some states specify target populations within legislation, creates common focus

Graphic Source: https://www.efficiencyvermont.com/news-blog/whitepapers/vermont-energy-burden

Community Engagement

- Key component of Procedural Equity – fair and just inclusion, equitable access, transparency, and input in planning
- Stakeholders inform the public interest for decision makers
- Community/customer input informs definition of target populations, equitable outcomes and metrics, program designs, solutions and more
- Best practices for engagement – authentic intent*

**Resource guide on public engagement*. https://www.ncdd.org/uploads/1/3/5/5/135559674/ncdd2010_resource_guide.pdf; and Institute for Local Government. (2015). *Principles of local government public engagement.* https://www.ca-ilg.org/sites/main/files/file-attachments/principles_of_public_engagement_jan_2015.pdf?1497552327

Distributional Equity in Planning

- What are the long-term bill impacts of the plan on target population customers?
- Does the plan provide equitable reliability and resilience benefits?
- Does the plan provide equitable access to DERs & grid services?

Community Benefits of Clean Energy Actions

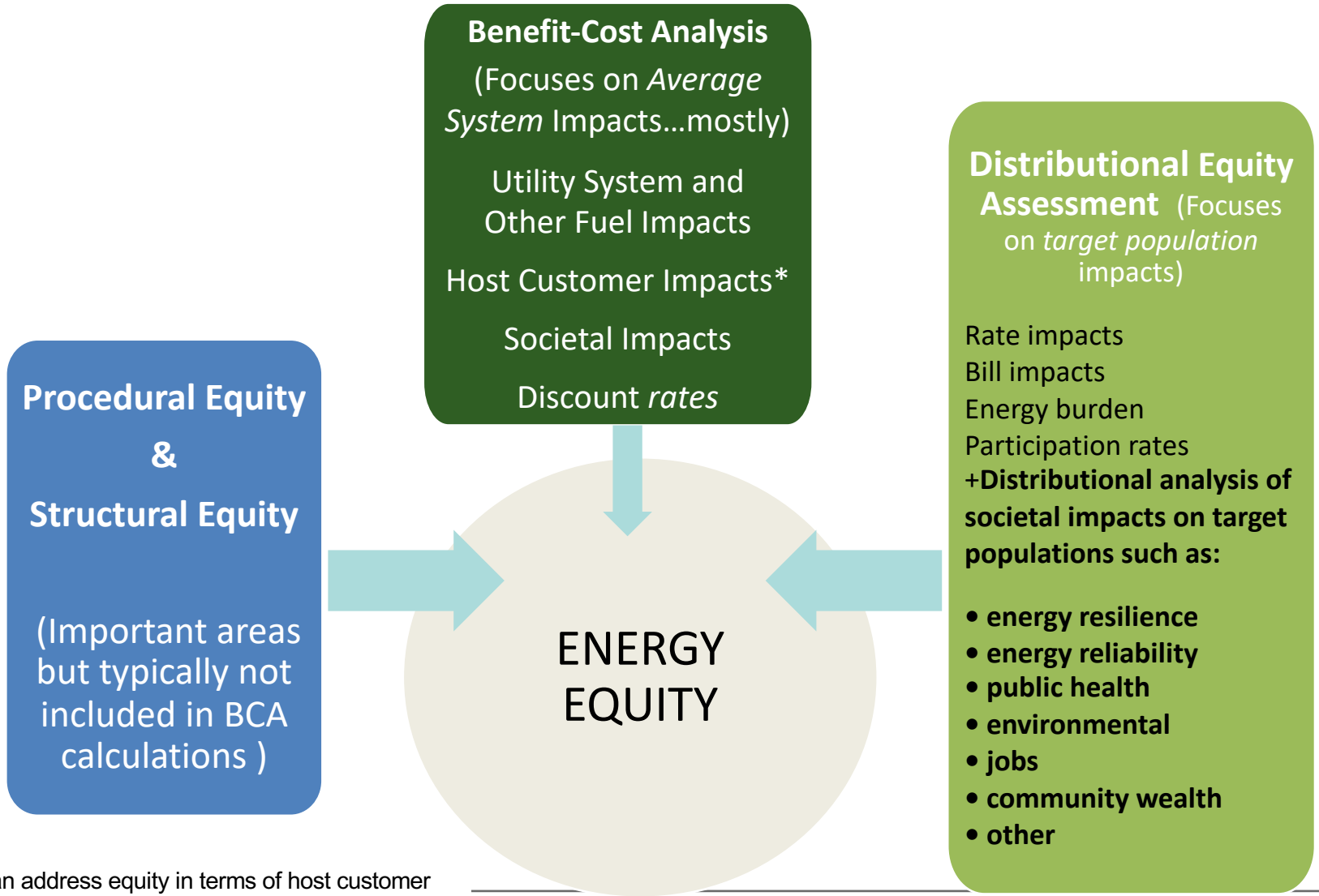
Combination of Host and Societal NEIs

Societal NEIs
Resilience
GHG Emissions
Other Environmental
Economic and Jobs
Public Health
Poverty alleviation
Energy Security

Host Customer NEIs
Transaction costs
Asset value
Productivity
Economic well-being
Comfort
Health & safety
Empowerment & control
Satisfaction & pride
Power/Quality
DER integration
Reduced Utility Bills

Source: Methods, Tools and Resources: A Handbook for Quantifying Distributed Energy Resource Impacts for Benefit-Cost Analysis, NESP

NSPM-Framework for Assessing Energy Equity



*Can address equity in terms of host customer benefits for programs targeted to specific sectors, communities or populations (e.g., low income)

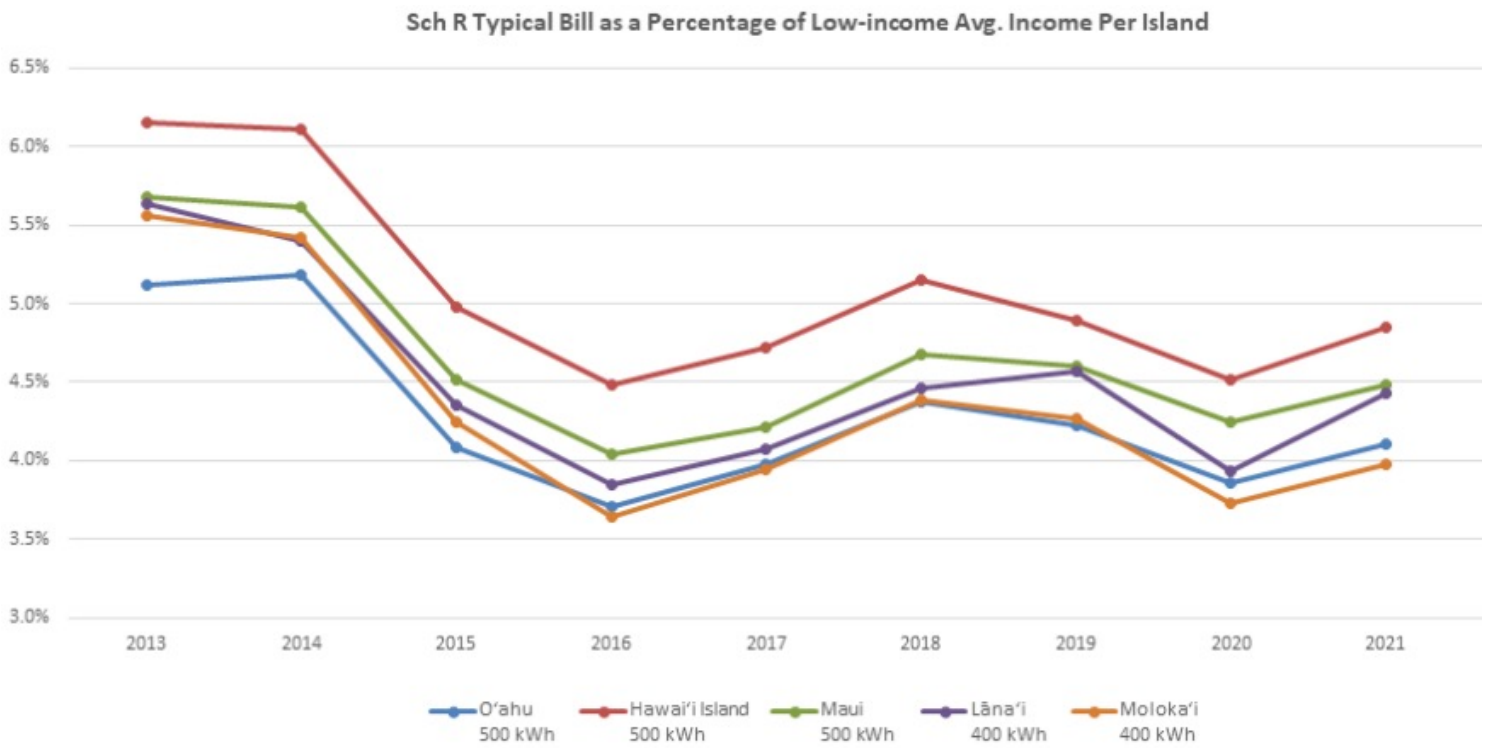
Source: National Standard Practice Manual (NSPM) Presentation for Oregon DSP Stakeholder Workshop, Overview of Key Concepts and Relationships to Distribution System Planning, presented by Julie Michals and Tim Woolf, 2/17/2022

Distributional Equity Analysis

- Compares impacts for target populations vs. other customers
  - **Expands** the rate, bill, and participation analysis;
  - **Adds** equity metrics such as energy burden, reliability, public health, arrearages, etc.…
- Design equity metrics to address jurisdiction policy goals
- Complements BCAs

Equity in Performance Metrics

- Hawaii
  - Energy burden, arrearages, disconnections
  - Participation in utility programs (LMI as % total)
- Minnesota
  - Equity in reliability
- Illinois
  - Energy burden by demographic
  - Reduction in total arrearages by zip code/census tract level



https://www.hawaiianelectric.com/about-us/performance-scorecards-and-metrics/affordability

Key Takeaways

- Every jurisdiction will have different equity goals/outcomes
- Authentic engagement in energy planning includes considering diverse viewpoints to shape desired outcomes and design solutions
- Distributional equity analyses are complementary to BCAs – each answers different questions
- Integrating equity into planning is evolving, additional research needed, collaborative engagement ongoing

Resources

- Participating in Power: How to Read and Respond to Integrated Resource Plans, Institute for Market Transformation and RAP
- Methods, Tools and Resources: A Handbook for Quantifying Distributed Energy Resource Impacts for Benefit-Cost Analysis, NESP
- Advancing Energy Equity in Grid Planning, PNNL
- Advancing Equity in Utility Regulation, LBNL
- Energy Infrastructure: Sources of Inequities and Policy Solutions for Improving Community Health and Wellbeing, Synapse and RAP

About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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