Equity Metrics in D.24-10-030

Framework for Workshop

R.21-06-017 High DER Proceeding

California Public
Utilities Commission

Logistics

- All attendees have been muted.
- To ask questions, please ‘raise your hand’  and a host will unmute you so you can ask your question.
- If you would rather type, use the “Chat” function. Questions will be read aloud by staff or responded to in the chat; attendees may be unmuted to respond to the answer verbally.

  *Reminder: Please press mute when done speaking 

Chat Participant List Raise Hand Settings Turn Camera on / off Mute / Unmute

Opening Remarks

Commissioner Darcie Houck

Agenda

Time	Agenda Item	Details
9:00 - 9:20 AM	**Welcome and Opening Remarks** • Opening remarks by Commissioner Houck • Energy Division Background and Workshop Framing slides	• Workshop logistics • Commissioner Darcie Houck sets the stage for the workshop and emphasize its purpose. • Energy Division opens with context and frames the workshop objectives
9:20 – 10:20 AM	**Overview of IOUs' Current DPP and proposed Metrics** • Presentation by IOUs	Covering: • High level current distribution planning practices. • Disaggregation efforts and existing metrics related to equity. • Proposed equity-related metrics. • Process of evaluation of the final list of metrics.
10:20 - 10:30 AM	**Break**	
10:30 - 11:20 AM	**Presentations: Perspectives on Equity and Metrics** • Duncan Callaway – **UC Berkeley** • **Energy Division** - Grid Resiliency and Microgrids/ Climate & Equity Initiatives • Faith Carlson - **Redwood Coast Energy Authority** • Roger Lin - **Center for Biological Diversity** • Linnea Jackson - **Hoopa Valley Public Utilities District** • Christine Selig - **PODER** • Jessica Tovar - **Local Energy Alliance**	Each panelist to share: • What does an equitable DPP look like? • How to define and measure equity in the DPP. • Suggestions for metrics to track equity in utility distribution plans.
11:20 - 12:00 PM	Open floor discussion: • Participants' reactions to presentations. • Questions to presenters (IOUs and SMEs)	Taking comment and questions from the chat and raised hands about what participants agree with, disagree, and want to add.
12:00 – 12:10 PM	**Break**	
12:10 - 12:50 PM	**Expert Panel Discussion: Equity Challenges and Opportunities**	Facilitated by Energy Division with participation from SMEs, IOUs, and the public.
12:50 – 1:00 PM	Closing Remarks and Next Steps	Summary of key takeaway, closing remarks, and next steps

Workshop Objectives

- **Define what equity means in the distribution planning process.**
- **Establish a vision of what the outcomes of an equitable distribution planning process look like.**
- **Propose data and metrics that can inform if the outcomes of the distribution planning process are equitable or inequitable.**
- **Propose data and metrics that can inform if equitable outcomes are increasing or decreasing.**

Background and Framing

Energy Division

Framing of Equity in the Distribution Planning & Execution Process (DPEP)

- The current regulatory compact includes the obligation to serve; utilities have the legal requirement to provide electric service to all customers in a non-discriminatory manner.
- Based on historical load, forecasts of future load and planning IOUs plan and execute distribution infrastructure where it is needed, and equipment must be used and useful to have costs recovered in rates.
- California's current trajectory emphasizes the importance of ensuring an equitable transition to electrification for everyone.
- The most recent HDER Decision directs that outcomes of the DPEP should be evaluated for equity.
- We do not have evidence on the High DER record that the current DPP is producing inequitable outcomes.
- Therefore, measuring and tracking metrics related to equity in the DPP will help evaluate if there are unintended inequitable outcomes.

Equity in the current DPEP

- Historically DPEP is reactive, focused on customer service connection requests without addressing load growth origins or purpose.
- Do demographic-based forecasting methods, such as household income introduce unintentional bias into planning?
  - Example: SCE's use of high-income (e.g., $150K+ households) assumptions as one factor in EV capacity forecasts –does this have any negative real-world impact on where infrastructure is built?
- How are equity-focused programs impacted by DPEP? What data should be tracked to inform this question?
- How are equity-driven EV infrastructure projects impacted by DPEP? What data should be tracked to inform this question?
- **What is needed is a data-driven approach to identifying equity metrics that can be measured to inform empirical analysis of DPEP outcomes to assess the degree to which equity is a problem or not.**

Staff Proposal

3.3.4. Include Metrics to Evaluate Equity in Utility Distribution Plan Reporting

- **Key Goal 1: Proactively consider equity as a priority in distribution planning.**
- To ensure that the energy transition does not inadvertently leave vulnerable communities behind, equity must actively be considered in the DPEP. The inputs, methodologies, and outputs of the DPEP should be evaluated for their impact on equity. The DPEP should be coordinated with existing equity programs to ensure they are accommodated.

- **Common Stakeholder Agreement:** Need for stakeholder workshops to refine metrics.
- Define how to determine whether there is a lack of equity in the DPP, if this represents a problem and what variables are correlated with improved equity.

Commission's Determination: OP 25

- Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (Utilities) must include metrics to track and evaluate equity in utility distribution plan reporting. **No later than 90 days from the issuance of this decision, Utilities shall hold a workshop to discuss further exploration of the following equity metrics, including correlated variables**:

Item	Metric
1	Percentage of customers served by the relevant equipment/facility enrolled in CARE (California Alternate Rates for Energy) or FERA (Family Electric Rate Assistance) programs.
2	Priority Populations Map percentile for the area served by the relevant equipment/facility, based on CalEPA's CalEnviroScreen 4.0 or the latest version.
3	Whether the equipment/facility serves a disadvantaged community. (Y/N)
4	Whether the equipment/facility serves a Tribal community. (Y/N)
5	Percentage of customers enrolled in the Medical Baseline program or receiving an equivalent medical discount in an opt-in rate without tiers.

No later than 45 days following the equity metrics workshop, Utilities shall submit a **Tier 3 advice letter** requesting approval of a final set of metrics and any correlated variables. The adopted equity metrics shall be considered for inclusion in the 2026-2027 Distribution Planning and Execution Process cycle. The adopted equity metrics shall be reported in the Grid Needs Assessment and Distribution Deferral Opportunity Report, now the Distribution Upgrade Project Report, annual filings.

Overview of IOUs' Current DPP and proposed Metrics

Pacific Gas & Electric – Bill Peter

San Diego Gas & Electric – Kimberley Chong

Southern California Edison – David Castle, Belinda Vivas

High DER: Equity Metrics Workshop

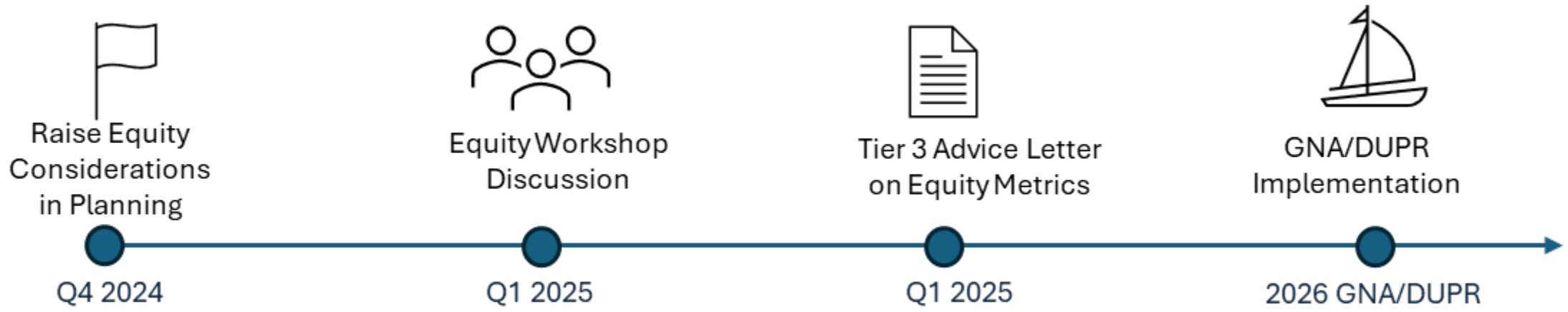
Joint Presentation by PG&E, SCE, and SDG&E

January 21, 2025

Agenda

Topic	Presenter	Time
Introduction/Agenda	PG&E	9:20-9:25
Overview of the DPP	SCE	9:25-9:30
IOU Definition of Equity in Planning	SCE	9:30-9:32
CPUC's Proposed Metrics	SCE	9:32-9:35
PG&E/SCE Response to Proposed Metrics	SCE	9:35-9:40
SDG&E Response to Proposed Metrics	SDG&E	9:40-9:45
SDG&E Potential Metrics	SDG&E	9:45-9:55
PG&E and SCE Potential Metrics	PG&E	9:55-10:05
Additional Considerations and Conclusion	PG&E	10:05-10:10
Q&A	All	10:10-10:20

Regulatory Timeline



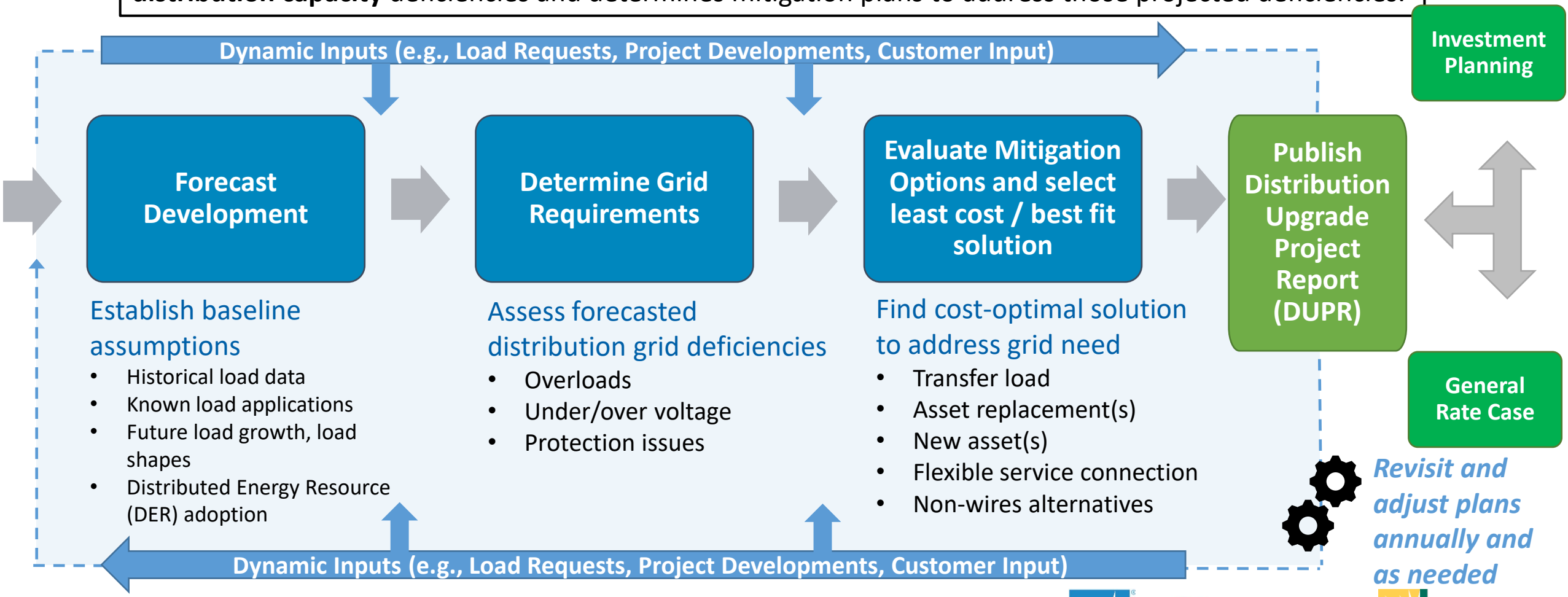
Overview of the DPP

IOUs have an obligation to serve all customers

- Per CPUC Code Chapter 3 (451-666) “Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities, as defined in Section 54.1 of the Civil Code, as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public."
- As noted by the Commision in the High DER final decision, "these metrics are requested for evaluation purposes, there is no framework wherein equity metrics are used for forecasting or planning distribution. The intention of this proposal is an annual evaluation of equity in distribution planning and does not involve modifying the planning process based on equity considerations.”

Distribution Planning Process (DPP)

The current **Distribution Planning Process** is an **annual**, **dynamic process** that identifies projected **distribution capacity** deficiencies and determines mitigation plans to address those projected deficiencies.



Further Discussion on Forecasting

- Accurate forecasting is the foundation of equitable planning.
- Known loads are the basis for the majority of forecast load growth in the short term. These are customer requests at a specified location.
- In the mid- and long-term, the bulk of growth forecast today is based on the disaggregation of the IEPR's forecast of load growth (and DER growth).
  - The IOUs develop various models ("propensity models" or "technology adoption models") to allocate the load and DERs where, and in what amount, they are most likely to show up based on a variety of data sources correlating load and DER growth to customer and geographic attributes.
  - Details of the disaggregation methodology (including updates) are presented each year at the Distribution Forecast Working Group meeting each Spring.
- In the future, other new proactive planning concepts adopted by the High DER decision – in particular, pending loads, community engagement feeding back into planning, and scenario planning – will be integrated into the forecasting process.
- All of these methodologies are designed to create an accurate load growth forecast for each area, so that the utility can construct additional capacity where needed without building unnecessary capacity.

IOU Definition of Equity in Planning

What Does “Equity in Planning” Mean to the IOUs?

- CPUC has not formally defined the concept
- IOUs propose that “equity in utility planning" seeks to address the following:
  - Providing access to safe, reliable, and affordable energy, regardless of a customer’s socioeconomic status, race, or geographic location
  - Ensuring load growth of all customers is appropriately forecast
  - Ensuring all customer requests for expansion of service, or new service, are reasonably met

CPUC's Proposed Metrics

Metrics proposed in the Decision

(1) Percentage of customers served by the relevant equipment/facility that are enrolled in the Commission's California Alternate Rates for Energy and/or the federal Family Electric Rate Assistance programs;
(2) The Priority Populations Map on the California Environmental Protection Agency website and CalEnviroScreen 4.0, or the most recent update at the time of filing, percentile for the area served by the relevant equipment/facility;
(3) Whether the equipment/facility serves a disadvantaged community;
(4) Whether the equipment/facility serves a Tribal community
(5) Percentage of customers enrolled in the Medical Baseline program(s) or receive the equivalent medical discount if they are enrolled in an opt-in rate that does not include tiers.

CPUC and Governmental Agencies' Definition of Communities

Disadvantaged Communities (DACs): refers to the areas throughout California which most suffer from a combination of economic, health, and environmental burdens. These burdens include poverty, high unemployment, air and water pollution, presence of hazardous wastes as well as high incidence of asthma and heart disease. CalEnviroScreen can be used to determine which communities are the most burdened or "disadvantaged."

Environmental and Social Justice (ESJ) Communities: refers to predominantly communities of color or low-income communities that are underrepresented in the policy setting or decision-making process, subject to a disproportionate impact from one or more environmental hazards, and are likely to experience disparate implementation of environmental regulations and socioeconomic investments in their communities. CPUC includes the following as ESJs:

- DACs
- Tribal Lands
- Low-income households
- Low-income census tracts

Priority Communities: refers to disadvantaged Communities, low-income communities and low-Income households meeting certain thresholds.

PG&E/SCE Response to CPUC Metrics

Summary of CPUC Metrics

- CPUC metrics are applied at the project level
- Customer groups based on a mix of customer counts and geospatial data
- Decision essentially proposes a **single metric type** applied to **five different criteria** of customer groups:

Metric:
To what extent does a capacity project serve this group…

Five Customer groups:

1. Low income (CARE/FERA)
2. Priority Populations (CalEnviroScreen)
3. Disadvantaged Communities (CalEnviroScreen)
4. Tribal Communities
5. Medical Baseline

PG&E/SCE Discussion on metric type proposed in the decision

- The metric type of "To what extent does a capacity project serve a group" may not provide useful information on customer need, and therefore whether "equality in planning" is being achieved.
  - If the metrics simply measure the projects and what customer groups they are serving, it doesn't show whether the planning process is meeting the capacity needs for those customer groups. For example, there could be sufficient headroom without the need for a new project .
- SCE and PG&E propose alternative metrics that consider both customer need as well as capacity projects deployed to meet the needs. These metrics will be much more insightful to assessing whether "equity in planning" has been achieved.
  - SCE and PG&E plan to provide the data listed in the decision, but recommend that focus be the proposed metrics, which will offer greater insight into actual customer outcomes.

SDG&E Response to CPUC Metrics

SDG&E Discussion on metrics proposed in the decision

- Identifies and maps customer types and specific demographics
- Measures and provides insight into metric percentages
- Provides transparent data on impacted groups
- Provides a baseline to explore future equity adjustments

SDG&E Proposal:

1. **Report CPUC-proposed metrics within the Distribution Upgrade Project Report (DUPR)**

SDG&E's Proposed Reporting of Metrics in DUPR

- The Distribution Upgrade Project Report (DUPR) is the successor to the Distribution Deferral Opportunity Report (DDOR)
- DUPR will provide stakeholders with an overview of each IOU's new Distribution Upgrade Projects to address grid needs in the DPP

Metric	Source	Reporting Format
CARE/FERA Enrollment	SDG&E	% of customers
CES4.0 Percentile		Not reportable*
Serves DAC*	CalEPA	% of customers
Serves Tribal	CalEPA	% of customers
Medical Baseline Designation	SDG&E	% of customers

*The SB535 Priority Populations designation ("DACs") includes CES4.0 percentiles

SDG&E Potential Equity Metrics

SDG&E's Potential Metrics

- Define DAC as outlined in the equity scenario of the Electrification Impact Study Part 2
  - SB535 Priority Populations
    - CalEnviroScreen 4.0
    - Low Income
    - Tribal
  - CARE/FERA
  - Medical Baseline

- SDG&E considering this definition to evaluate the following metrics
  1. Project Initiated
  2. Load Growth Ratio

SDG&E Potential Metric #1: Project Initiated

This metric measures the proportion of projects that are initiated on DAC circuits compared to non-DAC circuits, ensuring that grid needs for DAC and non-DAC are appropriately mitigated.

- Project initiation date is a required* reporting field in the DUPR. SDG&E defines initiation date as the date scoping or solutioning is completed.
- Distribution upgrade projects refers to the projects that are required* to be reported in the DUPR.
- Any circuit serving customers defined as DAC (per EIS Part 2 definition) will be designated as a DAC circuit

$$\frac{Number\ of\ Distribution\ Upgrade\ Projects\ Initiated}{Number\ of\ Distribution\ Upgrade\ Projects}$$

*D.24-10-030 p.129

SDG&E Potential Metric #2: Load Growth

This metric measures the proportion of load growth forecast for DAC customers compared to non-DAC customers, providing a transparent indicator of load growth for each group that may be considered for future equity adjustments.

- Mirrors equity analysis in Electrification Impact Study Part 2

$$\frac{\sum DAC\ Load\ Growth}{\sum All\ Load\ Growth}\ vs.\ \frac{\sum DAC\ Customers}{\sum All\ Customers}$$

PG&E & SCE Potential Equity Metrics

Summary of PG&E/SCE's Potential Metrics and Variables

IOUs suggest two metrics, measured for each customer group and for the system overall.

Metrics:

1. **Grid Access ("Head room")**
2. **Project Initiation**

Five Customer groups:

1. Low income (CARE/FERA)
2. Disadvantaged Communities (CalEnviroScreen)
3. Tribal Communities
4. Medical Baseline

+

System

*The SB535 Priority Populations designation ("DACs") includes CES4.0 percentiles, therefore we are consolidating the DAC and Priority Communities customer groups.

PG&E/SCE Metric #1 Grid Access (Current and Forecast)

Equity in planning means: "Our planning results in same grid access for different customer groups"

- Measures the amount of "headroom" per circuit (MW) for various customer groups
- Measures and reports headroom for all feeders for year 1 (current) and year 5 (forecast)
- For future year(s), headroom will consider forecasted load growth as well as planned capacity investments

Grid Access Metric (calculated for each circuit):

$$Circuit\ Capacity\ Rating - Circuit\ Peak\ Loading$$

Customer Group Aggregation

$$\frac{\sum(Capacity\ Rating - Peak\ Loading)}{\sum Count\ of\ Circuits}$$

(Calculated for each customer group as well as systemwide)

Note that the metric result may depend on the topography of the circuits serving a customer type (e.g., how long the feeder is).

PG&E/SCE Metric #2: Project Initiation

Equity in planning *means: "On average, different communities can expect needed projects to be approved with the same urgency"*

- Measures the percentage of projects in flight for various customer groups.

Already captured in GNA / DUPR

- **Projects Initiated**
- **Projects Identified**

Customer group Aggregation

$$\frac{\sum Projects\ Initiated}{\sum Projects\ Identified}$$

(Calculated for each customer group as well as systemwide)

- "Project Initiated" is defined as project approved, budgeted, and queued for execution. This includes only Planned Investments, as set forth in the GNA/DUPR.
- "Project Identified" means a grid need is identified, and includes both funded Planned Investments and unfunded Planned Solutions, as set forth in Grid Needs Assessment/ Distribution Upgrade Project Reports (GNA/DUPR) submitted by PG&E and SCE.

Summary of PG&E/SCE's Potential Metrics and Variables

We are contemplating these two metrics, measured for each customer group and for the system overall.

PG&E/SCE Potential Variable No.*	**Metric 1: Grid Access (Current and Forecast)**	**Metric 2: Project Initiation**
1	CARE/FERA	CARE/FERA
2	DAC	DAC
3	Tribal Community	Tribal Community
4	Medical Baseline	Medical Baseline
5	System (All Customers)	System (All Customers)

*The SB535 Priority Populations designation ("DACs") includes CES 4.0 percentiles, therefore we are consolidating the DAC and Priority Communities customer groups.

Open Question: How to classify whether a given feeder serves a given customer group

- Almost all circuits serve multiple customer groups
- Each feeder would need to be designated as whether it serves each community group
- Some customers groups are defined at customer level whereas or others are defined geo-spatially.

Additional Consideration

Other Considerations: Energization Timing

- The Energization OIR is establishing reporting of energization requests, including when energization requests "trigger" an upstream capacity upgrade.
  - This data will inform Timelines for Upstream Capacity Upgrades
- The IOUs propose to leverage the outcomes of the Energization OIR reporting and outcomes in the Distribution Planning Process
  - This will avoid creating duplicative or conflicting metrics or data with the Energization OIR

Conclusion

Conclusion and Next Steps

- The IOUs are supportive of efforts to evaluate equity in planning through metrics and other related activities
  - The IOUs will be assessing an equity scenario as of the Electrification Impact Study (EIS) Part 2
  - The IOUs will also be developing community engagement plans targeted towards DACs and ESJs
- Potential metrics are presented for consideration and discussion, and IOUs will consider feedback from today's workshop as well as the above efforts before finalizing proposed metrics in the Advice Letter due in March 2025
- Once the metrics are approved, the IOUs will need to work through any data and technical challenges to implement and begin reporting
- A framework is still needed to evaluate the data prior to considering any changes to the distribution planning processes
  - Any changes should consider and not negate the IOUs' obligation to serve all customers.

Q&A

Break – 10 minutes

Presentations: **Perspectives on Equity and Metrics**

PhD. Duncan Callaway

UC Berkeley – Associate Professor

Department of Energy & Resources Group

Division of Electrical Engineering

California Public
Utilities Commission

Perspectives on equity metrics

Duncan Callaway
UC Berkeley
January 21, 2025

A vision of the future…

- As costs for EVs and other electrified end-uses come down, adoption rates skyrocket for customer groups that have not historically adopted these technologies

..that we must avoid

- Distribution companies don’t have adequate staff and access to materials like transformers and protection equipment to meet this unexpected need
- As a result, service upgrades are denied for these customers at a higher rate than they are for others

Definition: *equitable access* to distribution grid services

- ***Access***:
  - Whether or not a customer is presently **able to connect** new DER and loads
  - For those customers that are unable, the **time** it takes for distribution companies to provide the ability
- ***Equitable* access**:
  - Access (ability to connect, time to wait for the ability) is independent of factors like race, ethnicity, income, and linguistic isolation

Definitions: Short term vs long term planning

- ***Short term planning***: deciding what projects will actually get built
- ***Long term planning***: investigating scenarios to understand the importance of long-term measures like
  - Workforce development
  - Supply chain development
  - Non-wires alternatives

…on factors like:

  - Whether customers will have equitable access
  - Ratepayer cost

What does an equitable DPP look like?

1. Projects that get approved and built are used and useful
   - This contains ratepayer costs while ensuring access
2. Distribution companies take measure to ensure they can:
   - respond to a range of future DER and load adoption scenarios, and
   - maintain equitable access

Key principle:

- Equitable access does not mean all customers have the same capacity for new load
- …but distribution companies must build new capacity in a timely manner as the *need* arises

How to measure equity in DPP?

- First, decide the scale at which to measure factors like race, ethnicity, and income
  - By customer, or
  - In a geographic area, like a census tract
- Track customer wait time to connect new load and DER
- Study a range of adoption scenarios to determine the highest plausible long-term need for
  - Number of distribution grid projects and staff required to complete them
  - Materials for those projects (transformers, protection equipment, etc)
- Ensure those needs can be met across all scenarios

Critical step: Adoption scenario development

- Who will adopt new DER and loads over the next decade?
- Using historical trends to predict this may lead to inequitable access in the future, *if those predictions are wrong*
- There is a need for alternative adoption scenarios with more participation from low-income groups and communities of color
    - Stakeholder engagement is important here to ensure outcomes are procedurally just

Energy Division

Grid Resiliency and Microgirds
Climate & Equity Initiatives

Meghan Cook – CPUC Climate Adaptation Analyst

Rosanne Ratkiewich – CPUC Grid Resilience and Microgrids Analyst

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Equity Metrics in the Climate Adaptation Proceeding

Presentation to the DPP Equity Metrics Workshop

Meghan Cook – CPUC Climate Adaptation Analyst

January 21, 2025

Climate Adaptation Proceeding - R.18-04-019

Purpose: Requires IOUs to assess forecasted extreme climate impacts on energy infrastructure and IOU operations decades into the future and identify options to mitigate threats by developing and submitting to the CPUC:

- Climate Adaptation Vulnerability Assessment (**CAVA**) every 4 years
- Community Engagement Plan (**CEP**) one year before their CAVA
  - CEP outlines how IOUs plan to engage with DVCs before, during, and after CAVA process

Informational: CAVAs are used to inform Risk Mitigation (RAMP), general rate cases (GRCs), and may be used in other long-term planning proceedings (e.g., Integrated Resource Plans, Gas Planning)

Equity Targets: Disadvantaged and Vulnerable Communities (**DVC**) defined as: 1) Tribes, 2) 25% highest CalEnviroScreen scores, 3) median income less than 60% of state median

Improvements to CAVA Requirements

- Commission adopted D.24-08-005 establishing improved CAVA guidelines on August 1, 2024
- Updates climate science & analysis requirements for CAVAs to align with best available science
  - Adopts new baseline climate scenario: SSP 3-7.0
  - Adopts Global Warming Level Approach for climate modeling
    - Requires IOUs to examine 1.5°C and 2°C warming scenarios
  - Orders IOUs to update requirements as Climate Assessments update best practices
- Requires IOUs to publicly present and seek stakeholder input on draft CAVAs 90 days prior to submitting to the CPUC
- Requires that IOUs demonstrate **Incrementality**, **Prioritization**, **Cost-Effectiveness**, and **Justification** of any post-CAVA investment requests in GRC or other applications

Phase 2 of Climate Adaptation Proceeding

- **Proceeding Scope to Consider Improvements:**

1.	**Should the Commission refine requirements regarding consultations with DVCs and the preparation of CEPs adopted in D.20-08-046 with regard to large IOUs, including but not limited to:**
1.1	Additional guidance regarding the purpose and intended outcomes of the CEP and DVC consultation processes?
1.2	Ways to reduce consultation fatigue and/or coordinate with other proceeding outreach processes?
1.3	Modifications to the definition of DVC adopted in D.20-08-026?
1.4	Additional guidance regarding consultation and collaboration with local governments during risk and vulnerability assessment processes? During adaptation proposal identification processes?
1.5	Refinement of Tribal consultation processes specific to climate adaptation matters?
1.6	Additional guidance regarding methods and scope for the determination of community adaptive capacity in CAVA analyses?
2.	**What are the impacts on environmental and social justice communities of actions taken in this proceeding, including the extent to which requirements impact achievement of any of the nine goals of the Commission's Environmental and Social Justice Action Plan?**

Consideration of Equity Metrics for the CAVAs

- The existing process for incorporating equity into the CAVA process is qualitative
  - Community Engagement Plans
  - Public comment opportunities on CAVAs
- Equity metrics can be incorporated into the analysis to provide a **quantitative** equity lens for climate adaptation in IOU planning
  - Complementary to the existing qualitative approach

Workshops to Consider Refinements to Equity

- CPUC held three public workshops in Fall 2024 as part of Phase 2:
  - **Community Engagement Workshops (2):** Address challenges of community engagement for CAVA process
  - **Equity Metrics Workshop (1):** Explore methodologies and metrics that can measure adaptive capacity impacts of CAVAs on DVCs
- Stakeholders included IOUs and community-based organizations, tribes, local governments, researchers, etc.
- Visit our website for workshop slides and recordings

Qualities of Equity Metrics in Climate Adaptation

- *Methods for quantitatively measuring a community's adaptive capacity to climate impacts*
  - **Adaptive Capacity**: A community's ability to adapt to climate impacts either by preventing impacts or recovering from them
  - **Climate Vulnerability**: How likely/ how intensely a community may be affected by climate impacts such as fire, flooding, heat, etc.
- CAVAs consider vulnerability of both communities and the energy infrastructure they rely on

Equity Workshop Framework

- *Issues Posed to Stakeholders:*
  - Should CAVAs require a combination of different metrics and methods?
  - Are different metrics useful for different purposes?
  - How might results vary depending on what metrics are used or how they are weighted?
- Potential Types of Metrics
  - Example: Household or census tract median income, Proximity to resources, Access to transportation, Pollution burden, Race or ethnicity, Age, Gender, Physical ability / health, Language barriers, Risk of a given climate event [flood, fire, heat, etc.]
- Presentation of Quantitative Tools

Takeaways from Equity Metrics Workshop

- **Emerging Research:** Use of energy equity metrics on state policy level is cutting-edge
- **Social Vulnerability Metrics:** Adaptative capacity of communities to outages/climate events in proximity to essential services (e.g., Sandia/ReNCAT tool)
- **Aggregating Data:** An example of a way to aggregate data is the (e.g., Vulnerable Communities Platform/California Office of Land Use and Climate Innovation (LCI))
- **Visual Data / Mapping:** Informing priorities and identifying impacts on DVCs aligned with diverse geography and climate change impacts
- **Developing Criteria:** Could inform best practices for tools and methodologies given diversity of IOU service territories and long-lived best practices that address evolving policies and technologies

Climate Adaptation Proceeding Next Steps

- Address Remaining Issues Scoped for Phase 2
  - Address identified community engagement barriers such as fatigue, funding, etc.
  - Considerations for a quantitative approach to measuring adaptive capacity
- Anticipate proposed decision addressing Phase 2 issues in mid-2025

For more information:

- **Visit:** www.cpuc.ca.gov/industries-and-topics/electrical-energy/climate-change

- **Email:**
  - Meghan Cook at meghan.cook@cpuc.ca.gov

Appendix

Climate Adaptation Equity Metrics Workshop Agenda

- Presentations from IOUs on existing use of metrics in CAVAs
  - SCE's use of their Community Resilience Metric (CRM)
  - PG&E's use of FEMA's Building Resilient Infrastructure and Communities (BRIC) Index
- Presentations from technical experts on existing tools and research
  - **Sandia National Lab** – Resilience Node Cluster Analysis Tool (ReNCAT)
  - **Pacific Northwest National Lab (PNNL)** – Energy Equity Resource Repository and other research
  - **Lawrence Berkeley National Lab** – National landscape of resilience planning and other research
  - **California Office of Land Use and Climate Innovation (LCI)** – Vulnerable Communities Platform
  - **PSE Health Energy** – Research on equity impacts of outages
  - **Electric Power Research Institute (EPRI)** – Climate READi Texas Case Study
  - **CPUC Staff** – Resiliency Valuation Index
- Visit our website for workshop slides and recordings

California Public Utilities Commission

Equity Metrics and Resilience Planning

Presentation to the DPP Equity Metrics Workshop

Rosanne Ratkiewich – CPUC Grid Resilience and Microgrids Analyst

January 21, 2025

Equity & Social Burden

Sandia National Laboratories partnered with Southern California Edison (SCE) to explore applications of the social burden index.

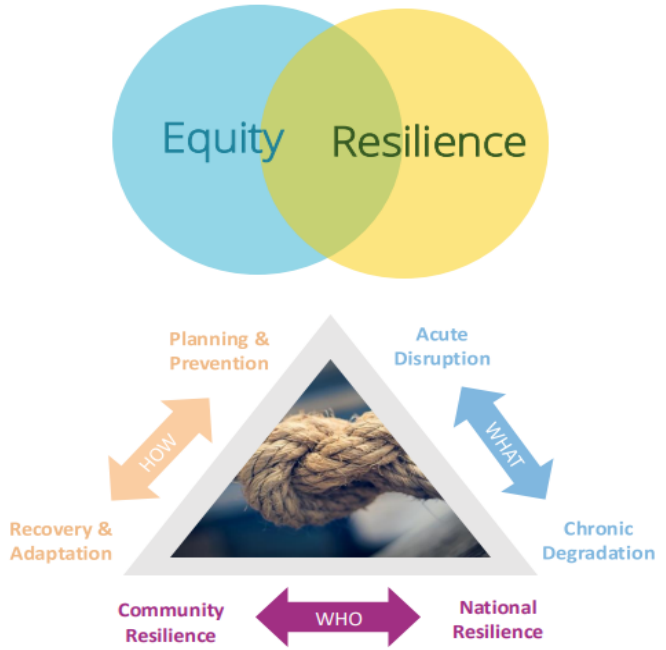
Equity and resilience are interdependent

Resilience is a component of equity

- Cannot have a truly equitable energy system if some communities are more resilient than others

However, equity is also a component of resilience

- Energy system is embedded in communities (social) and within other (physical) infrastructures
  - Embedded social inequalities independent of the energy system also impact equity
- Inequities are vulnerabilities
- Vulnerabilities reduce resilience
- Can escalate events from local concern to national security priority
  - e.g., New Orleans, Puerto Rico



3

Equity & Social Burden

The focus of the pilot project was on social burden as a resilience metric but the blue-sky baseline might be a metric to consider applying to distribution planning.

Introduction to Social Burden

Social Burden measures the ability of the built environment to provide people with the critical services they need for health and wellbeing, relative to people's differing abilities to obtain those services.

In a grid resilience context, Social Burden can help prioritize resilience investments to mitigate disproportionate harm from outages. It is a quantitative metric to measure *both* resilience & equity.

Burden to acquire a service:

- Increases with distance to facilities
- Decreases with additional facilities (diminishing returns, non-linear)
- Decreases with ability (a study-specific combination of socioeconomic and other indicators: *SCE's Community Resilience Metric)

$$Social\ Burden = Effort/Ability \cong \frac{Effort\ to\ Obtain\ Service_{people,services}}{Service\ Levels_{facilities,services} \times Baseline\ Capacity_{people}}$$

Wachtel, A., Melander, D., & Jeffers, R. (2022). Measuring Societal Infrastructure Service Burden (No. SAND2022-2029R). Sandia National Lab.(SNL-NM), Albuquerque, NM (United States).

4

For more information:

- **Visit:** https://www.cpuc.ca.gov/resiliencyandmicrogrids
- **Email:**
  - Rosanne Ratkiewich at rosanne.ratkiewich@cpuc.ca.gov

Community Choice Association

Jennifer Baak – California Community Choice Association (CalCCA)

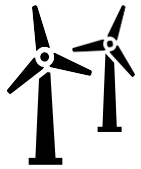
Faith Carlson – Redwood Coast Energy Authority (RCEA)

Equity Metrics Workshop
CCA Perspective

January 21, 2025

Presenters:
Jennifer Baak – California Community Choice Association (CalCCA)
Faith Carlson – Redwood Coast Energy Authority (RCEA)

What are CCAs?



Community aggregation of electricity load to:

- Purchase clean, renewable energy
- Set competitive rates vis-à-vis IOU generation rates
- Develop local programs for residents and businesses

Community-driven public agencies, not for-profit corporations, operating as:

- Joint powers authorities (SDCP)
- Single jurisdictions (CleanPowerSF, SJCE)
- Hybrid JPAs (CalChoice)

Enabled by AB 117 (2002) to allow energy choice for retail customers. In 2024, CCAs serve:

- 216 communities
- 21 of 58 counties (34%)
- 195 of 462 cities/towns (42%)
- 14 million+ California customers

CCA Perspective on Equitable Distribution Planning

- Affordable Electrification
  - DER Program/Tariff Design
  - DER Targeting/Siting
  - Gas System Retirement Impacts
- Reliability/Resiliency Upgrades
- Energization

Equitable Distribution Planning Outcomes

- Reliable customer access to the grid
- Access to essential services
- Grid capacity for electrification

Reliable Customer Access to the Grid

Recommendations:

- Apply existing metrics on outage duration, frequency, etc. to more granular areas, potentially down to the transformer.
- Include more outage types, such as EPSS, PSPS outages.
- Report on a percentile basis which transformers have worst performance.
  - Include as a layer with ICA maps.
  - Layer with DAC, CalEnviroScreen, CARE/FERA and Medical Baseline enrollment rates, and CPUC defined Areas of Affordability concern.
- Report on frequency of maintenance preventative vs reactive (outage based) maintenance.

Access to Essential Services

- Recommendations:
  - Measure customer ability to access Essential Services, Critical Facilities, and Community Resource Centers during outage by distance to nearest such facility.
    - How reliable is power to these facilities?
    - Do these facilities have resilient technologies so they can stay online in outage?
    - How quickly are these facilities being built and is there capacity for new facilities of these types?
  - Layer this with the previous metrics.

Capacity for Electrification

- Recommendations:
  - Improve reliability for those without access due to infrastructure
    - Address previous two outcomes.
  - For those without access to electrification due to cost
    - Look into panel upgrade alternatives for equity areas to ensure that those customers do not get priced out of electrification if capacity upgrades may be needed.
    - Keep watch for other cost savings proposals.

Thank You!

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Faith Carlson
Regulatory and Legislative Policy Manager
FCarlson@RedwoodEnergy.org

Center for Biological Diversity

Roger Lin – Senior Attorney

California Public
Utilities Commission

Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future

Equity Metrics Workshop

January 21, 2025

Intro: We already know the grid is inequitable.

- Disadvantaged Communities (DAC) face “systematically lower circuit hosting capacity for PV” relative to non-DAC communities.

- Targeted grid (or non-wire) investments?

To achieve a high DER future, “there is an opportunity to put at the front of the queue communities with historically low DER adoption rates . . .”

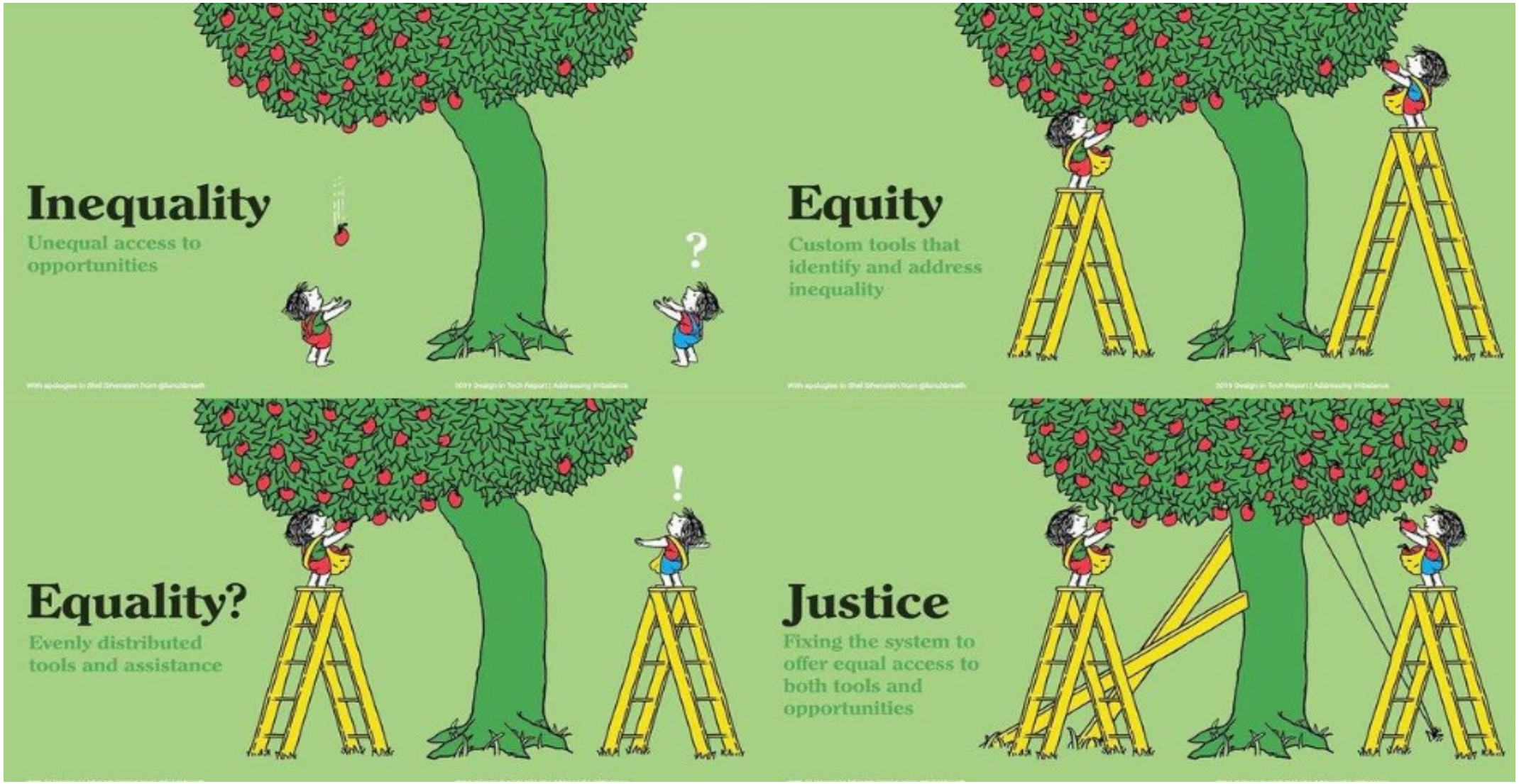
- Brockway, Conde and Callaway, *Inequitable Access to Distributed Energy Resources Due to Grid Infrastructure Limits in California* (September 2021).

Decision Authorizing this Workshop:

- What are we doing here?
  - “while these metrics are requested for evaluation purposes, there is no framework wherein equity metrics are used for forecasting or planning distribution. The intention of this proposal is an **annual evaluation of equity in distribution planning** and **does not involve modifying the planning process based on equity considerations**.”

- Community engagement (will come back to this)

What is Equity in Distribution Planning?



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To achieve a high DER future, “there is an opportunity to put at the front of the queue communities with historically low DER adoption rates . . .”

- Inequitable Access to Distributed Energy Resources Due to Grid Infrastructure Limits in California (September 2021) Brockway, Conde and Callaway.

Opportunity: Community Engagement

- IOUs required to address "how **community needs** (including the Tribal community, disadvantaged community, and environmental social justice and equity concerns **are incorporated** into Utilities' [Distribution Planning]."

- How can a High DER future **serve the needs** of DAC residents?
  - Community resilience?
  - Community priorities for decarbonization?
  - Community ownership of resources?
  - Community economic development opportunities?
  - Other? Find out!

- **Partner with and fund CBOs** to make engagement meaningful (maybe some of these other presenters?)
  - SB 350 Low-Income Barriers Study, part A, Recommendation (incorporated in ESJ Action Plan and prior Commission decisions)

Metrics to track equity in utility distribution plans

- (Technical) Burden should not be on public

- Quantitative:
  - Resiliency
    - Example: PSE Healthy Energy, *Incorporating Equity in Energy Resilience* (2024)
  - Medical Baseline

- Qualitative:
  - Community Engagement
    - How many communities engaged?
    - Which identified projects have been prioritized or built?
      - How many community needs met?

Hoopa Valley Public Utilities District

Linnea Jackson – General Manager

California Public Utilities Commission

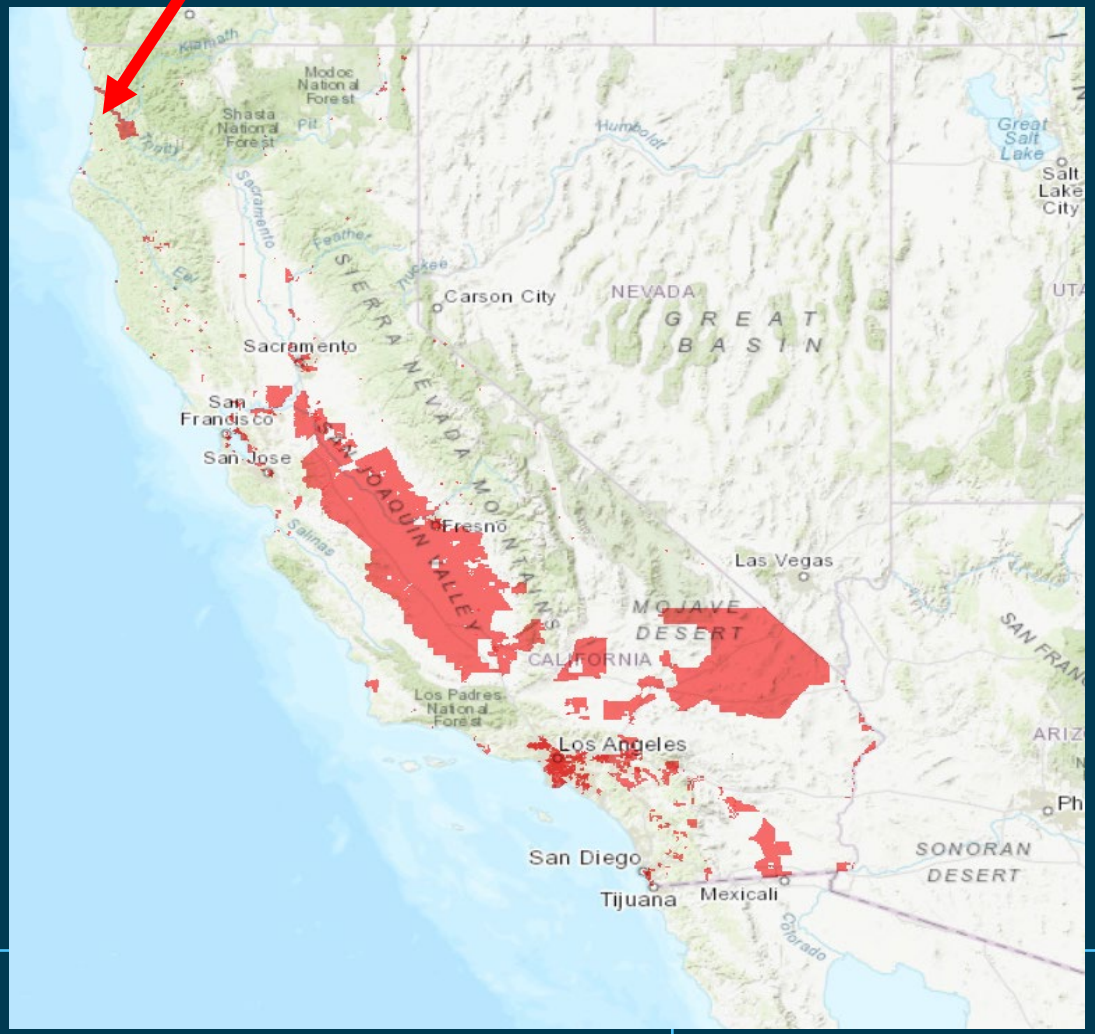
ENERGY METRICS WORKSHOP

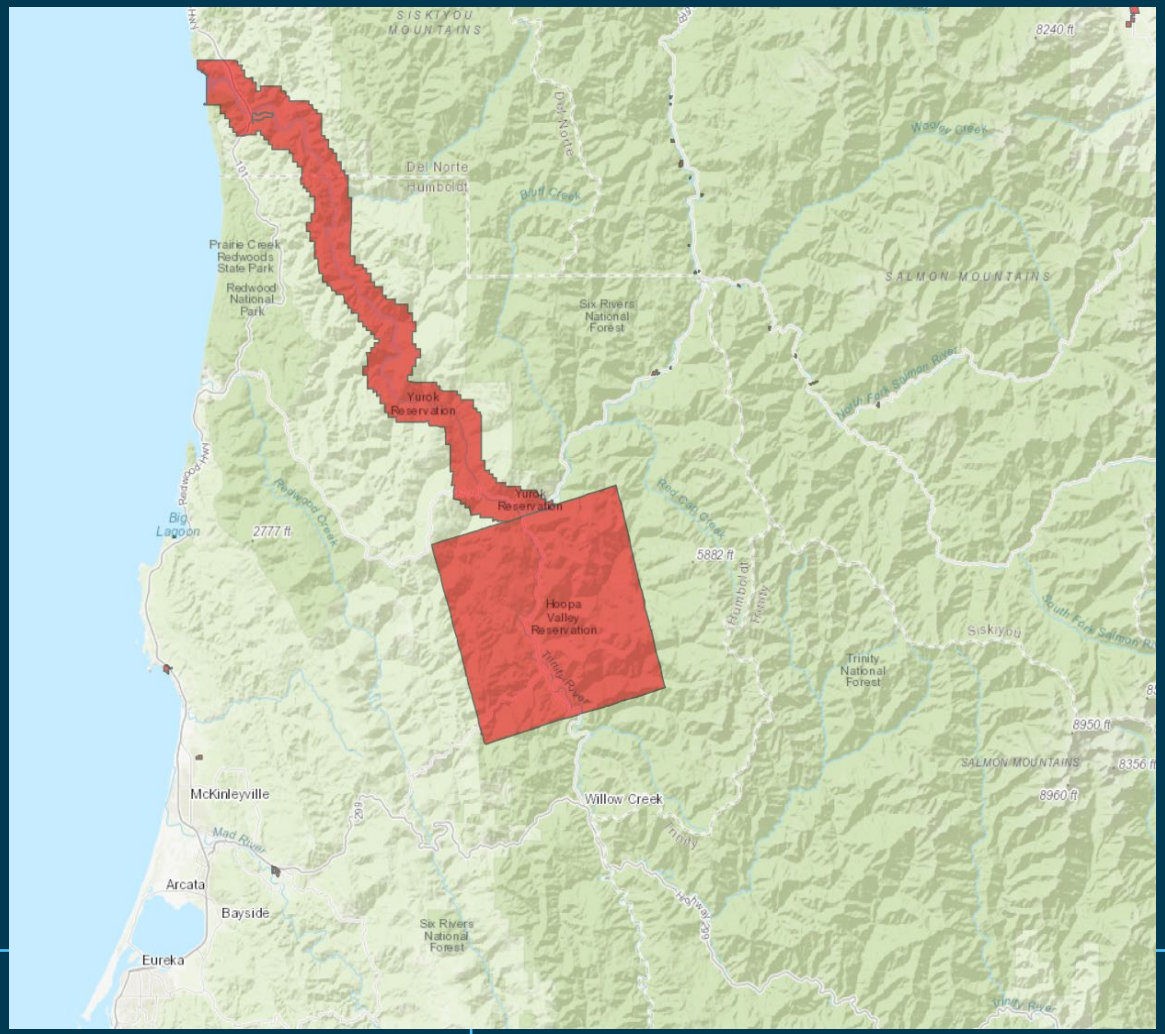
JANUARY 21, 2025

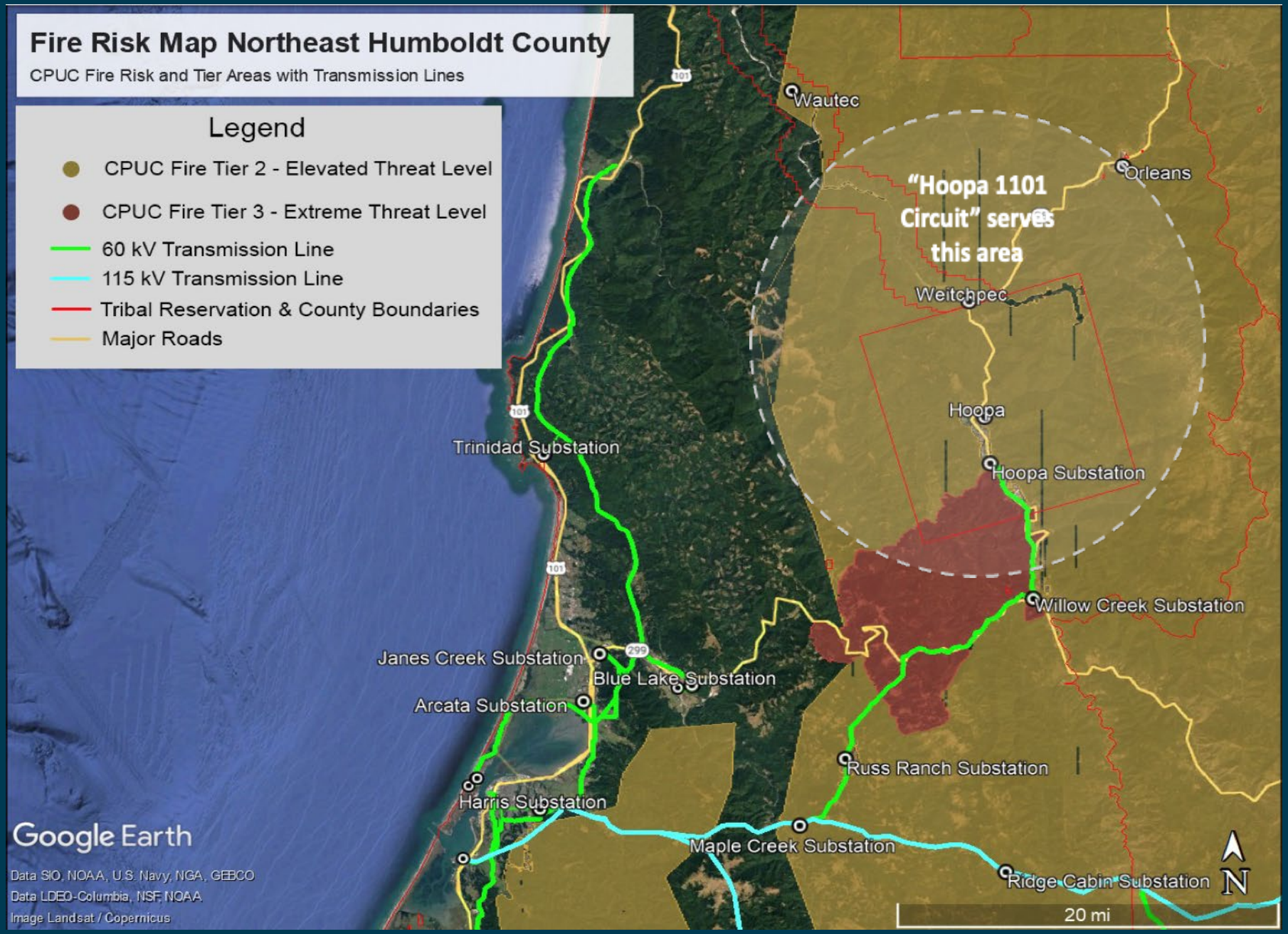
HUMBOLDT COUNTY

HVPUD was chartered in 1982 and for the past 43 years we have provided essential critical services to the Hoopa Valley Indian Reservation including water, broadband and energy initiatives.

DISADVANTAGED COMMUNITIES MAP 2022






Fire Risk Map Northeast Humboldt County
CPUC Fire Risk and Tier Areas with Transmission Lines
Legend
CPUC Fire Tier 2 - Elevated Threat Level
CPUC Fire Tier 3 - Extreme Threat Level
60 kV Transmission Line
115 kV Transmission Line
Tribal Reservation & County Boundaries
Major Roads
"Hoopa 1101 Circuit" serves this area
Wautec
Orleans
Weitchpec
Hoopa
Hoopa Substation
Trinidad Substation
Willow Creek Substation
Janes Creek Substation
Blue Lake Substation
Arcata Substation
Russ Ranch Substation
Harris Substation
Maple Creek Substation
Ridge Cabin Substation
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Data LDEO-Columbia, NSF, NOAA
Image Landsat / Copernicus
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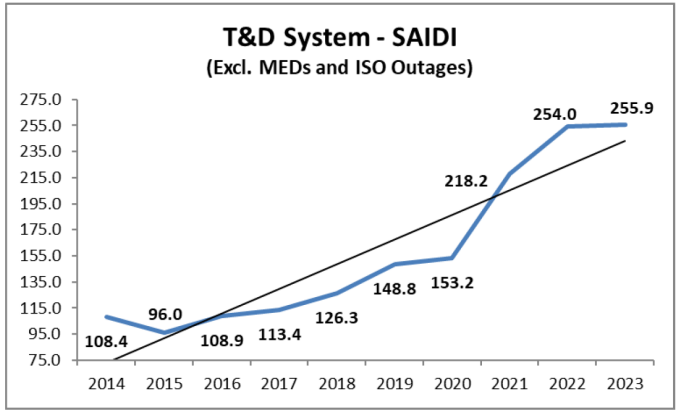
PG&E 2023 ANNUAL ELECTRIC RELIABILITY REPORT- TOP 1% OF WORST PERFORMING CIRCUITS

- The net total of 33 individual circuits represents one percent of the total number of circuits in PG&E's distribution system.
- For the purposes of this reliability report, PG&E's focus in developing the worst performing circuit lists has been on the impact on the *average customer on the circuit*.
- The average PG&E customer throughout PG&E's territory experiences 255.9 outage minutes per customer.

Chart A



HOOPA 1101 STATISTICS (ON BOTH THE WORST PERFORMING CIRCUITS BY OUTAGE FREQUENCY AND THE DURATION OF THE SUSTAINED OUTAGES)

TABLE 73 FOCUSES ON THE DURATION OF SUSTAINED OUTAGES-THE HOOPA 1101 CIRCUIT EXPERIENCES 2,447 OUTAGES MINUTES, WHICH 9.6 TIMES THE AVERAGE.

#	DIVISION	SUBSTATION	CIRCUIT NAME	TOTAL CUSTOMERS	CIRCUIT MILES	% OH	% UG	HFTD	3 YR AVG MAINLINE OUTAGES	3 YR AVG AIDI
1	HUMBOLDT	GARBERVILLE	GARBERVILLE-1102	1818	142	94	6	1 & 2	27	3629
2	NORTH VALLEY	PIT NO 5	PIT NO 5-1101*	123	27	89	11	2	9	3459
3	FRESNO	BALCH NO 1	BALCH NO 1-1101	27	15	100	0	2	2	3252
4	DE ANZA	LOS GATOS	LOS GATOS-1106*	1619	74	96	4	2 & 3	17	3024
5	KERN	POSO MOUNTAIN	POSO MOUNTAIN-2101	147	59	100	0	1 & 2	17	2859
6	HUMBOLDT	HOOPA	HOOPA-1101*	2098	142	92	8	1, 2, & 3	19	2447
7	HUMBOLDT	WILLOW CREEK	WILLOW CREEK-1103*	1548	88	88	12	2 & 3	11	2225
8	NORTH VALLEY	ELK CREEK	ELK CREEK-1101*	901	175	91	9	1 & 2	16	2129
9	PENINSULA	WOODSIDE	WOODSIDE-1101	1806	74	84	16	1, 2, & 3	7	2124
10	FRESNO	DEVILS DEN	DEVILS DEN-1101	68	34	100	0	1	6	2072
11	NORTH VALLEY	CHALLENGE	CHALLENGE-1101*	706	49	98	2	2 & 3	8	2022
12	CENTRAL COAST	BEN LOMOND	BEN LOMOND-0401*	889	24	96	4	3	14	2014
13	SIERRA	ALLEGHANY	ALLEGHANY-1102	165	18	94	6	3	4	1999
14	SIERRA	ALLEGHANY	ALLEGHANY-1101*	1078	78	97	3	1, 2, & 3	12	1909
15	CENTRAL COAST	FELTON	FELTON-0401	49	4	75	25	1, 2, & 3	1	1908
16	SIERRA	PLACERVILLE	PLACERVILLE-2106	5344	287	95	5	1, 2, & 3	18	1720
17	CENTRAL COAST	BEN LOMOND	BEN LOMOND-1101	744	15	100	0	3	11	1718
18	CENTRAL COAST	LOS OSITOS	LOS OSITOS-2103*	845	110	94	6	1 & 2	14	1715
19	NORTH BAY	SILVERADO	SILVERADO-2104*	3792	155	88	12	1, 2, & 3	19	1704
20	KERN	POSO MOUNTAIN	POSO MOUNTAIN-2103	26	20	100	0	1 & 2	5	1702
21	NORTH VALLEY	BUCKS CREEK	BUCKS CREEK-1101	5	5	100	0	2 & 3	0	1687
22	YOSEMITE	CURTIS	CURTIS-1703	3888	206	96	4	1, 2, & 3	10	1559

Table 73

CRITICAL METRICS

- Prioritization of Marginalized Communities
- Government/Community Engagement
- Transparency and Accessibility –Access to data
- Fair Distribution of Benefits and Burdens
- Metrics for Evaluation-
- Customer Enrollment in programs like CARE, FERA and the Medical Baseline Program.
- Community characteristics like CalEnviroScreen scores and service areas in a disadvantaged community or Tribal community.
- Energization of tribal government projects

FUTURE METRICS

- Customer service
- Metrics to track project execution in utility distribution plan reporting
- Metrics to track whether the grid needs are fully addressed by the planned investment.
- Metrics related to **community engagement**, including the level of participation and how community feedback is incorporated into the DPP.
- Metrics that track the **impact of distribution planning on underserved communities** and how effectively their needs are being addressed
- Metrics related to **access to renewable energy resources**

- The metrics tracked should reflect a **holistic view of equity,** including energy burden, access to programs, health impacts, and community self-determination.
- Metrics should be tracked on an annual basis as part of the Grid Needs Assessment and Distribution Deferral Opportunity Report process.

THANK YOU!

LINNEA JACKSON, HVPUD GM
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GM@HOOPAVALLEYPUD.COM

PODER

PhD. Christine Selig - Advisory Board Member

California Public
Utilities Commission

Christine Selig

Christine Selig Associates
www.christineselig.com

¡PODER!
SAN FRANCISCO

Building Energy Equity and Power

People Organizing to Demand Environmental & Economic Rights

CALIFORNIA PUBLIC UTLITIES COMMISSION EQUITY METRICS DISTRIBUTED ENERGY WORKSHOP -

January 21, 2025

PODER

PODER's mission is to organize with Latinx immigrant families and youth to put into practice people-powered solutions that are locally based, community led and environmentally just. We nurture everyday people's leadership, regenerate culture, and build community power.

Campaign & Program Areas

We have four areas of work to advance environmental and climate justice in San Francisco.

- Community Organizing & Building Power
- Intergenerational Leadership Development
- Solidarity Economy & Climate Resilience
- Civic Engagement & Immigrant Rights

PODER Youth at one of our Bicis del Pueblo Shop days in the Mission.

SAN FRANCISCO
HEALTHY & RESILIENT HOMES

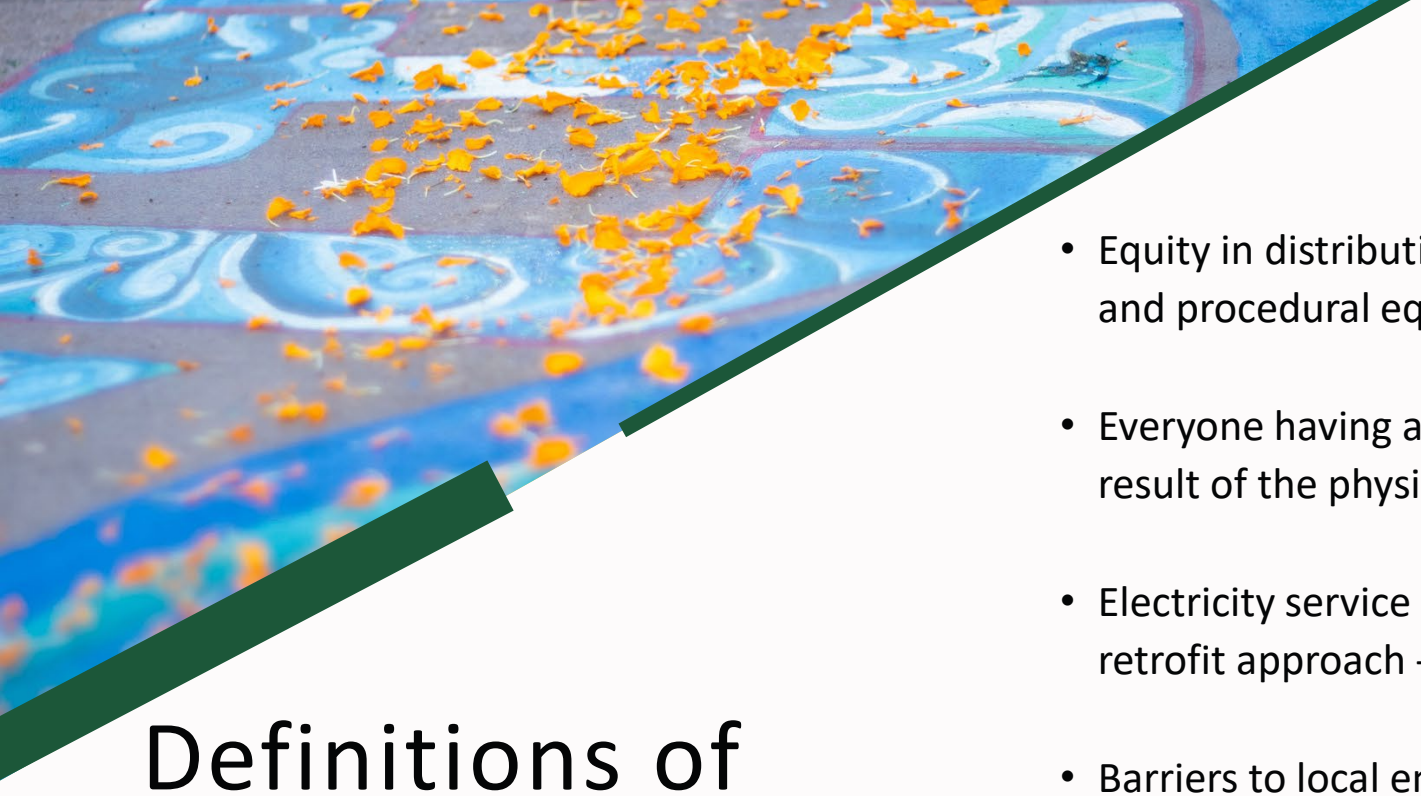
Local

1. Bryant Street Demonstration project
2. Buildings Operations Task Force
3. Climate Equity Hub
4. The Buildings Upgrade Prize

Statewide

1. Coalitions
2. Supporting Equitable Building Performance Standards
3. CEC Equitable Building Decarbonization Direct Install Program
4. UC Research Studies

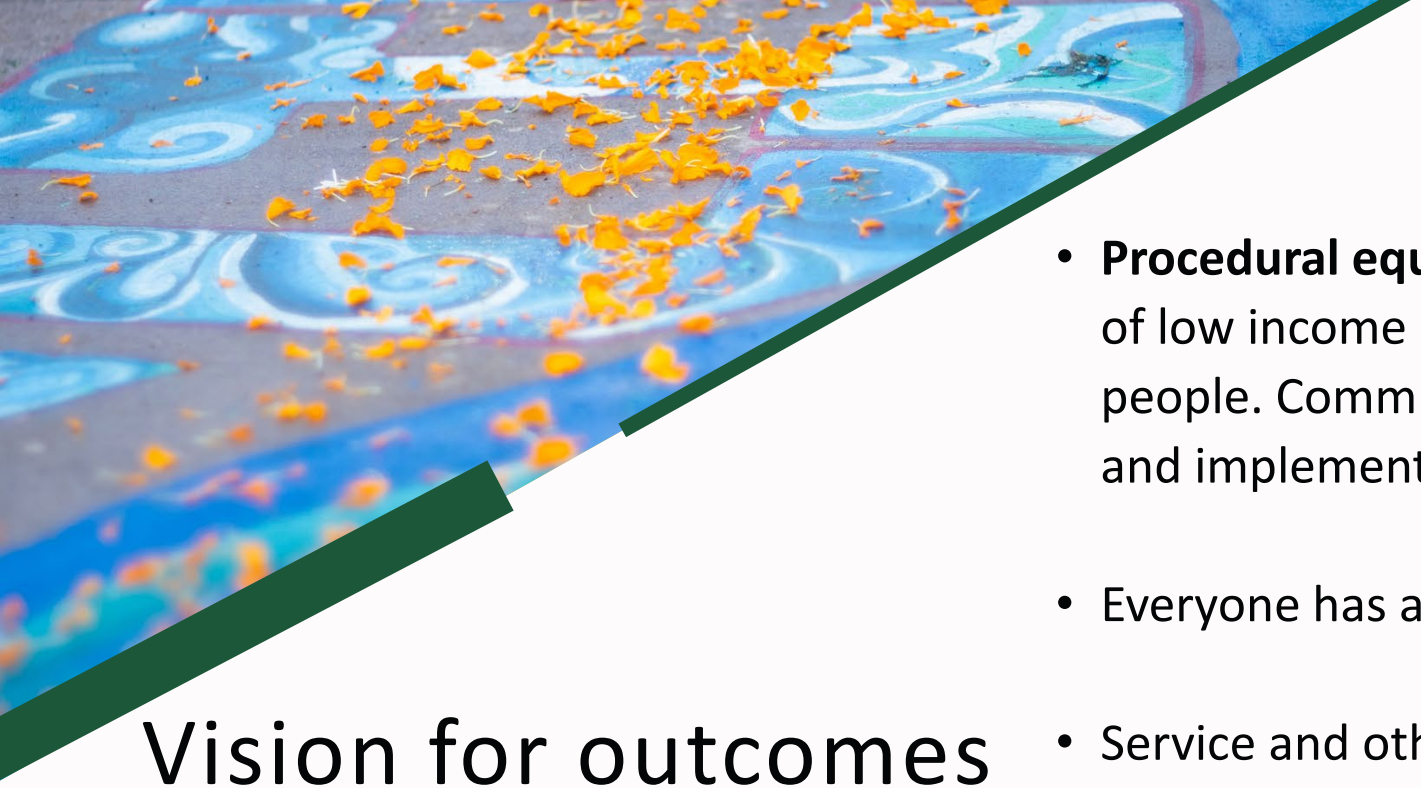
PODER members at our Mothers Day celebration at Hummingbird Farm



Definitions of Equity in Energy Distribution Planning

- Equity in distribution of energy planning is important in terms of outcomes and procedural equity.
- Everyone having access to the sustainable electricity they need – both as a result of the physical infrastructure and the actual cost.
- Electricity service capacity models based on an equitable whole home retrofit approach - health, safety and resiliency.
- Barriers to local energy production removed, and LEP is incentivized.
- Ability to get off of fossil fuels completely.
- Ability generate electricity locally – resilience, reduce energy bills.
- Equity and sustainability come from the same root causes and or system is built to address both equity and sustainability.

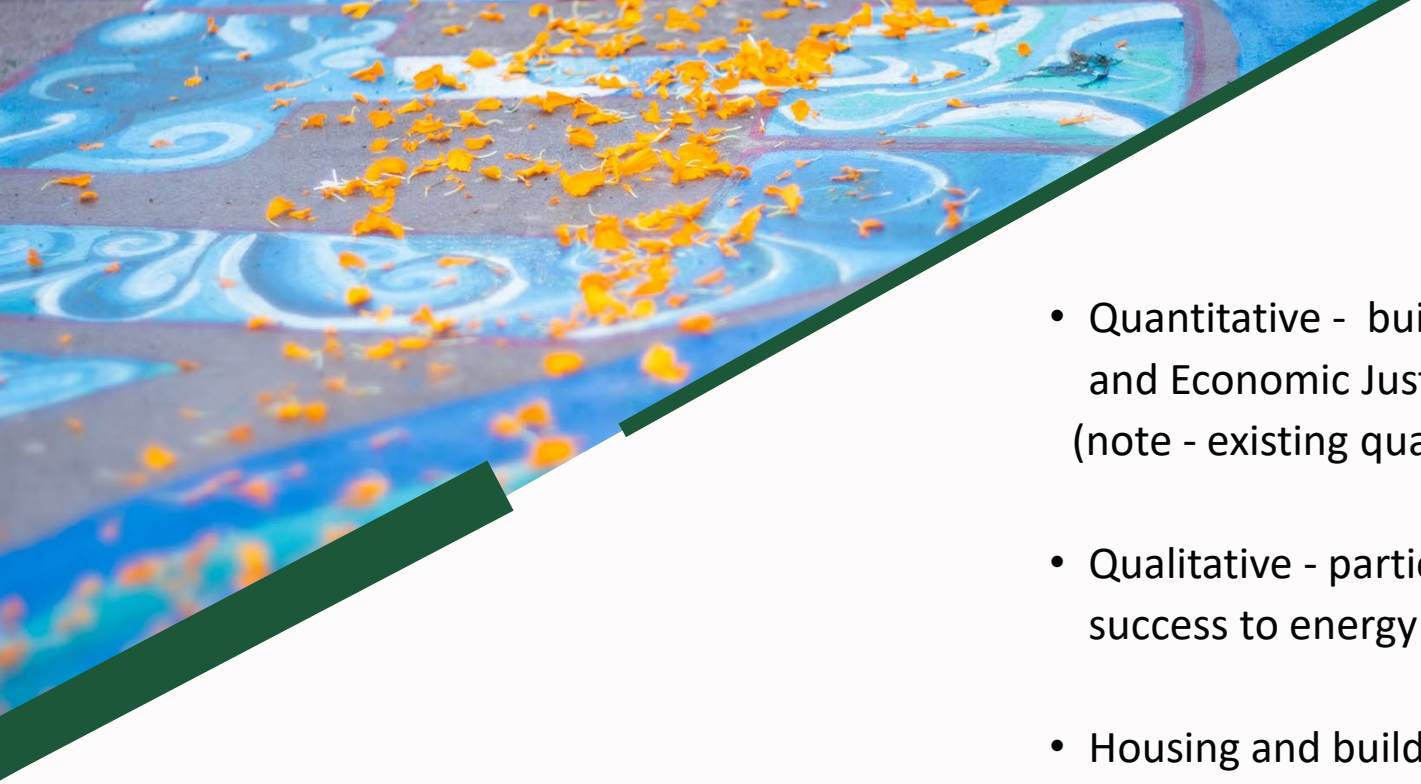
SAN FRANCISCO HEALTHY & RESILIENT HOMES



Vision for outcomes of an energy equitable distribution planning process

- **Procedural equity** - equitable process and meaningful engagement of low income communities and communities of color - Every day people. Community based organizations are partners in designing and implementing the planning and evaluation process.
- Everyone has access to the electricity they need.
- Service and other infrastructure upgrades are affordable and timely.
- Local solar energy production and battery storage is incentivized, encouraged and supported.
- Includes workers, displacement prevention and expansion of low income and workforce housing.

SAN FRANCISCO HEALTHY & RESILIENT HOMES

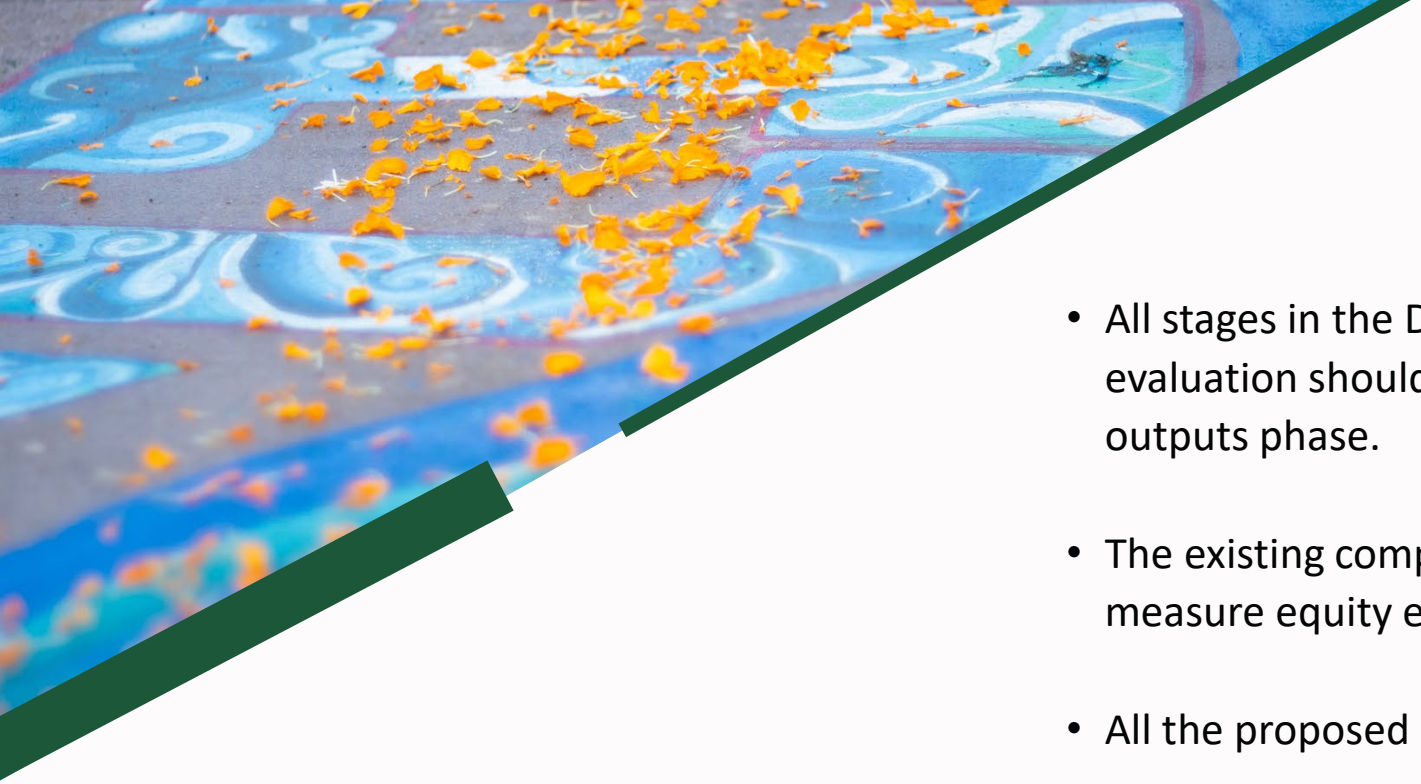


Data and metrics to track and inform equity outcomes are:

- equitable/inequitable
- increasing/decreasing.

- Quantitative - build on existing quantitative metrics adding federal Climate and Economic Justice Screening Tool (CEJST).
  (note - existing qualitative metrics are insufficient).
- Qualitative - participatory research case studies that capture the barriers and success to energy efficiency and electricity access.
- Housing and building stock conditions and building and community readiness as it relates to electricity access.
- Participatory research models that engage CBOs as partners in engagement and research.
- Triangulate data utilizing both qualitative and quantitative analysis.
- Build on existing research.

SAN FRANCISCO HEALTHY & RESILIENT HOMES

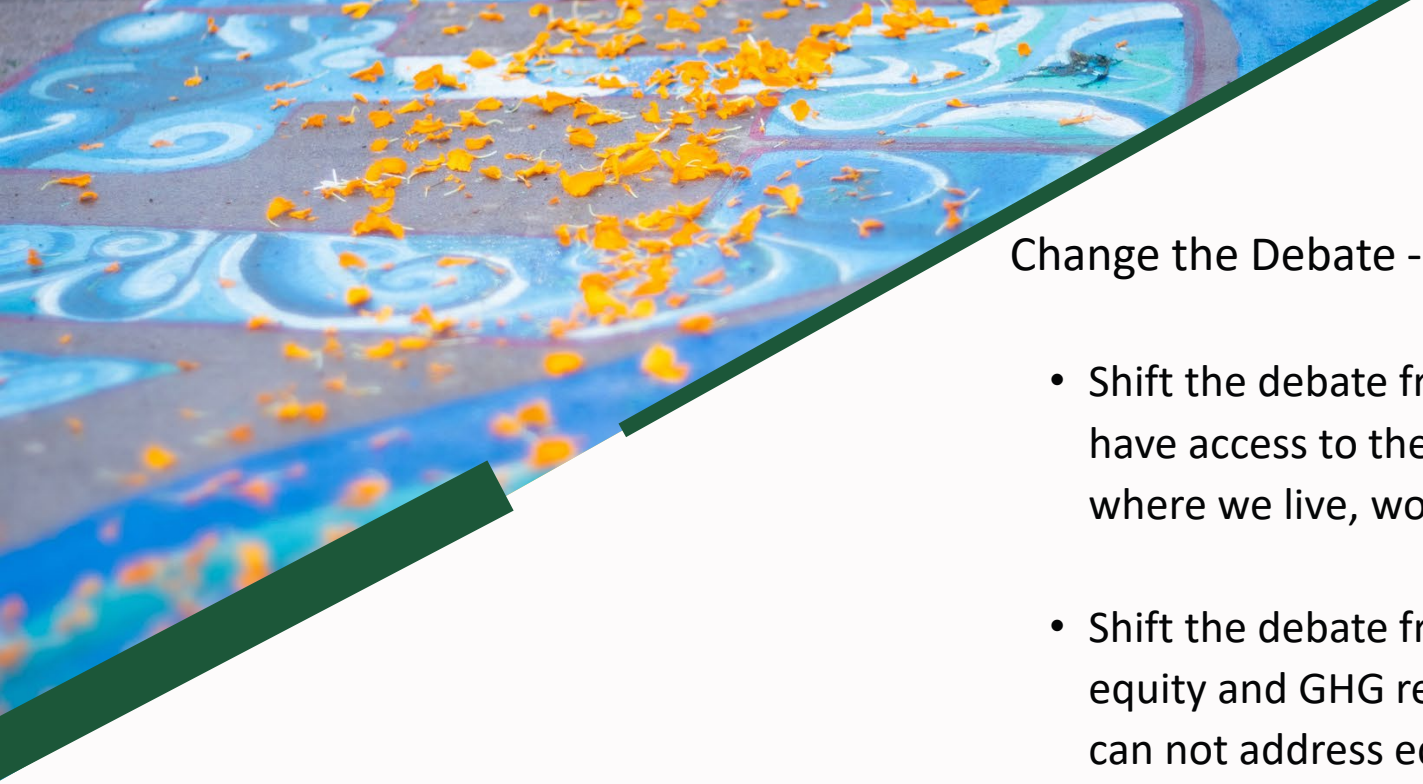


Data and metrics to track and inform equity outcomes are:

- equitable/inequitable
- increasing/decreasing.

- All stages in the Distribution Planning Process (DPP) for equity evaluation should address equity - inputs, methodologies, and/or outputs phase.
- The existing components or processes within the DPP can be added to measure equity effectively.
- All the proposed metrics add value, but they are insufficient.
- Benchmarks should be based on temporal trends and specific goals.
- Challenges foreseen are incomplete data.

SAN FRANCISCO HEALTHY & RESILIENT HOMES



Change the Debate -

- Shift the debate from sacrificing specific communities to a world where we all have access to the sustainable electricity we need for a thriving healthy life - where we live, work and play :)

- Shift the debate from either equity or greenhouse gas reductions to both equity and GHG reductions. We can not address GHGs without equity and we can not address equity without addressing GHGs.

Another energy system is possible !

SAN FRANCISCO HEALTHY & RESILIENT HOMES

Our crew of Promotoras doing immigration resource outreach in the Excelsior district.

Statewide & National Coalitions

- BEEP: BUILDING, EQUITY, ENERGY AND POWER (LOGO & WEBSITE COMING SOON :))

SAN FRANCISCO HEALTHY & RESILIENT HOMES

Policy: Supporting Equitable Building Performance Standards

PODER's Roles:

- San Francisco BPS - 20,000 square feet and above.
- California BPS - 50,000 square feet and above.
- California BPS Equity Strategy - [Senate Bill 48 – The Building Energy Savings Act]
- US Community Climate Shift SEBPS Co-Learning Collaboration

Partners:

People's Climate Innovation Center

PSR-LA Physicians for Social Responsibility Los Angeles

California Energy Commission

Community Climate Shift

Facilitating Power

IMT Institute for Market Transformation

Emerald Cities Collaborative

Local Clean Energy Alliance — clean energy jobs & healthy communities

Community Climate Shift SEBPS 9 Co-Learning Teams:

California, Washington State, Minneapolis MN, Chicago IL, Philadelphia PA, St Louis MO, Kansas City MO, Washington DC, New Orleans LA

San Francisco Healthy & Resilient Homes

Research: University of California Participatory

California Housing Equitable Decarbonization

Research Team Lead: UC Berkeley Terner Center for Housing Innovation

Research Question:

- Will decarbonization efforts lead to equitable outcomes, or exacerbate health, financial, and other disparities, particularly for lower-income households and communities of color?

Timeline: June 2023-May 2026

Funding: California Air Resources Board

PODER's Role: Participatory Action Committee Research Advisory Committee

Designing California's Clean and Climate Resilient Electrical Grid for Vulnerable Communities

Research Team Lead: UC Santa Barbara's 2035 Initiative, UC San Diego, & UC Berkeley

Research Questions:

- What could make electricity systems resilient in the face of escalating climate disasters?
- What would enable residential electrification and distributed energy resource adoption?
- What policy instruments would help communities implement these types of residential electrification changes?

Timeline: May 2024 – Summer 2025

Funding: California Climate Action Grant, UC Climate Action Initiative

PODER's Role: Community Advisory Board

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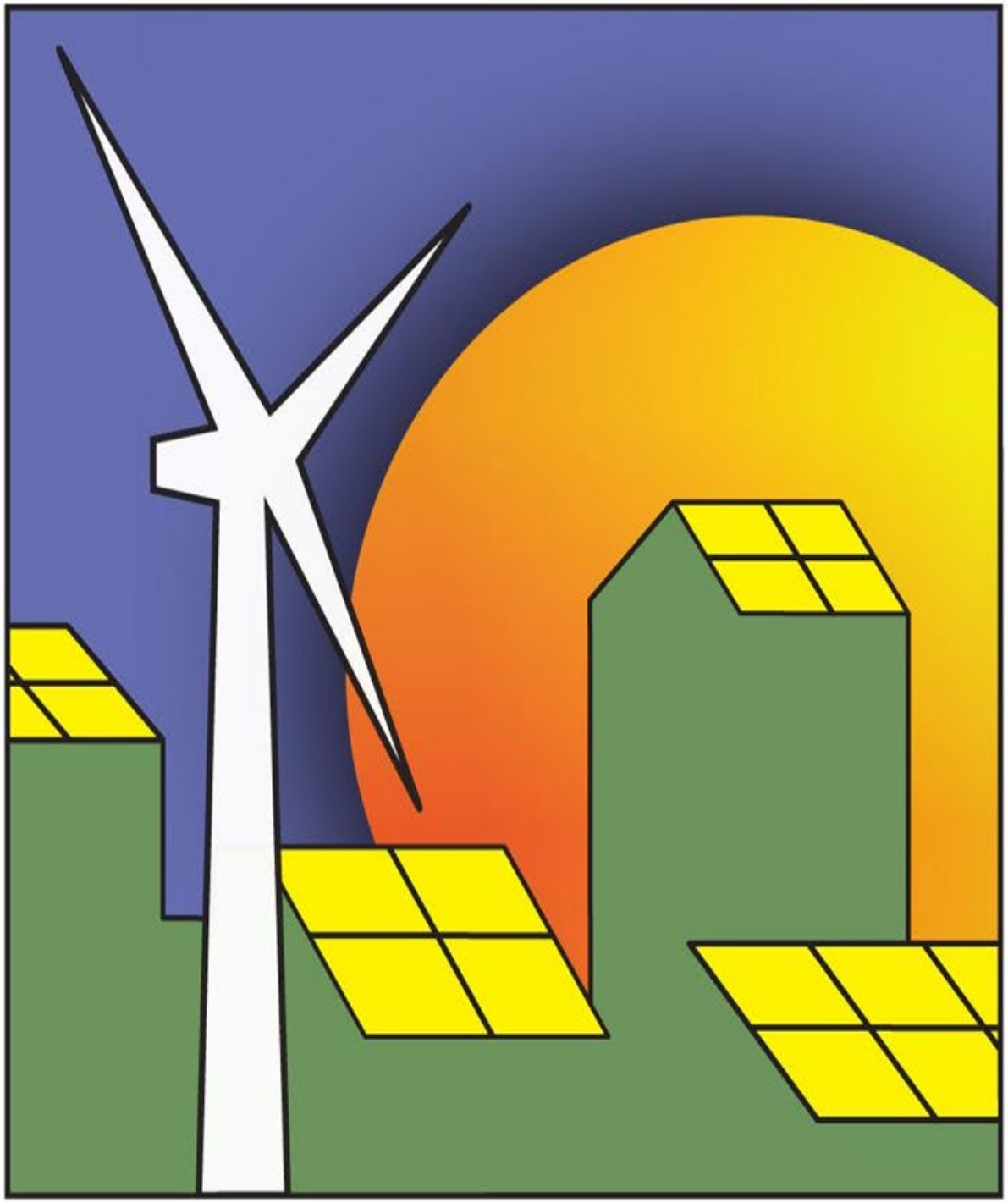
SAN FRANCISCO HEALTHY & RESILIENT HOMES

Local Clean Energy Alliance

Jessica Tovar – Executive Director

California Public
Utilities Commission



LOCAL

CLEAN ENERGY

ALLIANCE

We are living in a multitude of crises caused by fossil fuel dependence …

LOCAL CLEAN ENERGY ALLIANCE

SoCal Fires

Transmission Infrastructure

- Death & Destruction by Utility Wildfires
- Power Shut Offs Leaving Vulnerable without Electricity

-People like Disabled & Elderly

-Food & Medicines are spoiling

-No Distribution of N95 masks

-No Means for Elderly & Disabled to Abruptly Evacuate means more deaths of our most vulnerable populations

LOCAL CLEAN ENERGY ALLIANCE

Eaton Fire - Altadena

CALIFORNIA

Investigators study Eaton Canyon electrical tower area as possible origin of Altadena fire

Electrical lines and towers are seen on Sunday along North Altadena Drive to the northwest of where the fire may have been sparked. (John McCoy/For The Times)

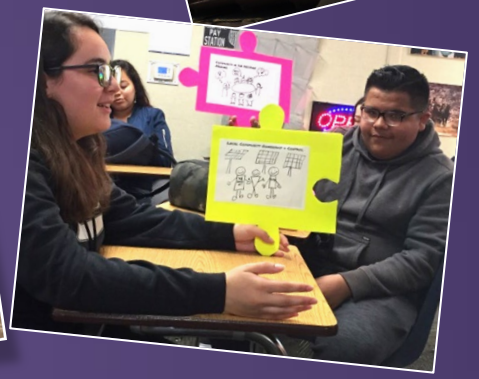
Search Donate Fundraise gofundme

Fire Relief for My Family

LOCAL CLEAN ENERGY ALLIANCE

High DER is Local Clean Energy for Community Resilience

- Clean energy jobs
- Affordability
- Local investments
- Local wealth
- Health & Safety
- Community Ownership & Control
- Reduce pollution



LOCAL CLEAN ENERGY ALLIANCE

Microgrid

A local source of electricity supply powered by clean solar energy that powers:

- local buildings like community buildings
- street lights
- refrigerators for perishable food or medicines.

Battery Storage

Rooftop Solar

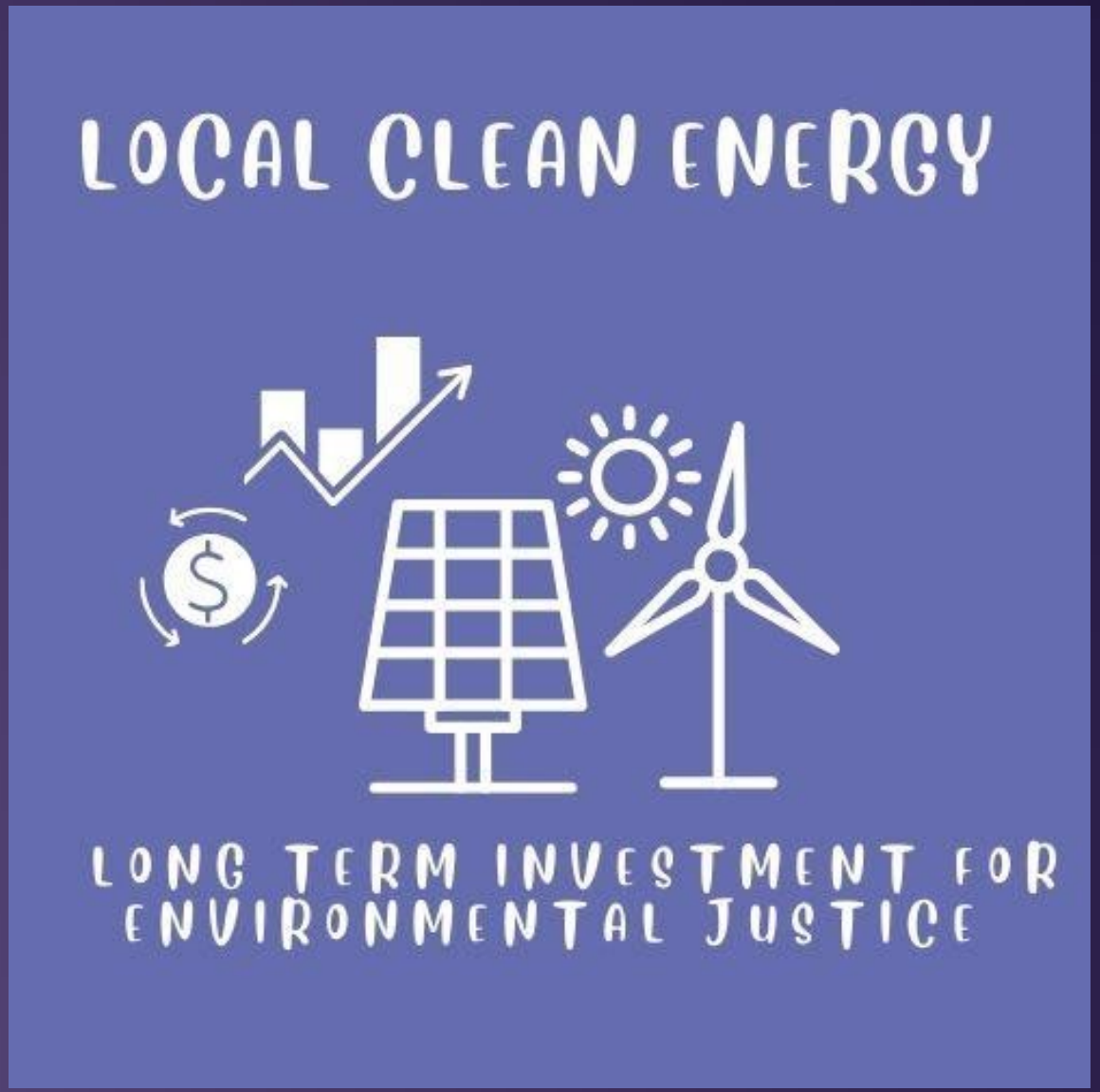
LOCAL CLEAN ENERGY ALLIANCE

Local Investment in Community Resilience!

LOCAL CLEAN ENERGY ALLIANCE

Local Investment

- ★ Builds Circular Wealth
- ★ Powers Communities
  True Local Clean Energy
- ★ Reduces Local Pollution
- ★ Reduces Deadly Mega Wildfires



LOCAL CLEAN ENERGY ALLIANCE

High DER - Resilience
Reinstate policies that give community power & ownership of local clean energy

Net Energy Metering
Virtual Net ENergy Metering

LOCAL CLEAN ENERGY ALLIANCE

High DER should be Community Solutions

Community based solution for HDER

Incentives for localized clean energy sources of power

Other distributive resources; demand response, energy efficiency, electrification etc

Measuring

Metrics need to go further Justice 40 Federal Screen

Suggestions for metrics to track equity in utility distribution plans.

CPUC should be providing the TA with Community Organizations

California Public Utilities Commission,
We need you to start making decisions that protect vulnerable communities over corporate profits.

Invest in Resilience
before Disaster!

LOCAL CLEAN ENERGY ALLIANCE

Community based clean energy solutions for survival.

Clean Power to the People

Jessica Guadalupe Tovar
Executive Director of
Local Clean Energy Alliance

jessica@localcleanenergy.org415-766-7766

#CleanPowertothePeople

LOCAL CLEAN ENERGY ALLIANCE

Open Floor Discussion
(40 min)

- All attendees have been muted.
- To ask questions, please ‘raise your hand’  and a host will unmute you so you can ask your question.
- If you would rather type, use the “Chat” function. Questions will be read aloud by staff or responded to in the chat; attendees may be unmuted to respond to the answer verbally.

  *Reminder: Please press mute when done speaking 

Chat Participant List Raise Hand Settings Turn Camera on / off Mute / Unmute

Break – 10 minutes

Expert Panel Discussion: Equity Challenges and Opportunities

Energy Division

1. At what stages in the Distribution Planning Process (DPP) should equity be evaluated?

For example, should it be assessed during the inputs, methodologies, and/or outputs phase?

2. Which existing components or processes within the DPP can be leveraged to measure equity effectively?

3. What challenges do you foresee in collecting and analyzing data for the proposed equity metrics, and how can these challenges be addressed?

4. Among the proposed equity metrics, which do you believe are the most valuable, and how can they be applied to evaluate equity?

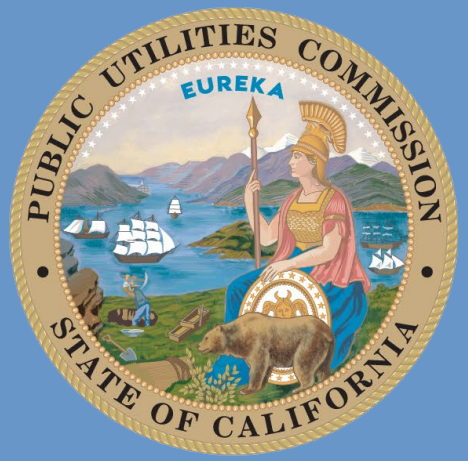
5. How should we interpret each proposed equity metric?

- What benchmarks can be used to evaluate progress?
- Should benchmarks be based on temporal trends (over time), or should specific goals be set for each metric?

Closing Remarks and Next Steps

Next Steps

- No later than 45 days following this equity metrics workshop, Utilities shall submit a Tier 3 advice letter requesting approval of a final set of metrics and any correlated variables. (March 7th)
- The adopted equity metrics shall be considered for inclusion in the 2026-2027 Distribution Planning and Execution Process cycle.
- The adopted equity metrics shall be reported in the Grid Needs Assessment and Distribution Deferral Opportunity Report, now the Distribution Upgrade Project Report, annual filings.



California Public Utilities Commission