

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**ENERGY DIVISION**

**RESOLUTION E-5480**

**September 17, 2026**

**R E S O L U T I O N**

Resolution E-5480. Southern California Edison Company, Pacific Gas and Electric Company and San Diego Gas & Electric Company implementation of Equity Metrics in the Distribution Planning and Execution Process.

**PROPOSED OUTCOME:**

- Approves with modification the jointly filed proposals of Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company concerning the implementation of Equity Metrics of the Distribution Planning and Execution Process pursuant to ordering paragraph (OP) 23 of Decision 24-10-030 filed in the joint Advice Letter (AL) SCE AL 5498-E, PG&E AL 7530-E, SDG&E AL 4617-E.

**SAFETY CONSIDERATIONS:**

- There are no safety considerations related to this resolution.

**ESTIMATED COST:**

- There are no costs associated with this resolution. The implementation of this Resolution may impact costs in the future.

By Advice Letters 5498-E, 7530-E and 4617-E Filed on March 7, 2025.

---

**SUMMARY**

This Resolution adopts, with modifications, the equity metrics proposed by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E), collectively referred to as the “joint utilities,” to measure equity in each utility’s yearly Distribution Planning and Execution Process (DPEP), pursuant to Decision (D.)24-10-030. Advice Letter 5498-E contains a joint

proposal from PG&E and SCE, and a separate proposal from SDG&E on the information and sources used to measure the equity within each utility's DPEP.

Pursuant to D.24-10-030 (the Decision), this Resolution establishes reporting requirements for the joint utilities to annually evaluate equity in distribution planning using metrics that track how equitably distribution grid upgrades are allocated over time.

## **BACKGROUND**

This Resolution disposes of Advice Letter 5498-E as ordered by D.24-10-030, issued on 03/07/2025. The Decision directed investor-owned utilities (IOUs) to develop and propose a set of equity metrics to support equitable planning outcomes within the Distribution Planning and Execution Process (DPEP). As the decision explains, equity metrics within DPEP are for evaluation purposes only and are not to be used for forecasting or distribution planning. The intention is an annual assessment and does not involve modifying the planning process based on equity considerations.

Reporting is established as part of the Grid Needs Assessment (GNA)/ Distribution Upgrade Project Report (DUPR) process to ensure tracking is done on a recurring, annual basis.

The Decision required IOUs to present their proposed metrics at a workshop convened by Energy Division, followed by the submission of a Tier 3 Advice Letter 45 days later. The IOUs complied, presenting their proposals at the January 21, 2025, workshop and submitted a Tier 3 Advice Letter 5498-E on March 7, 2025.

In Ordering Paragraph 25 (OP25), the Decision specifies that the utilities shall explore the following CPUC-proposed equity metrics in a public workshop, including correlated variables:

1. Percentage of customers served by the relevant equipment/facility enrolled in the California Alternate Rates for Energy (CARE) or the Family Electric Rate Assistance (FERA) programs;
2. Priority Populations Map percentile for the area served by the relevant equipment/facility, based on the California Environmental Protection Agency's (CalEPA) CalEnviroScreen 4.0, or the latest version at the time of filing;
3. Whether the equipment/facility serves a disadvantaged community (Y/N);
4. Whether the equipment/facility serves a Tribal community (Y/N); and

5. Percentage of customers enrolled in the Medical Baseline program or receiving an equivalent medical discount in an opt-in rate without tiers.

Following the equity metrics workshop, Utilities were required to submit a Tier 3 advice letter requesting approval of a final set of proposed metrics and any correlated variables. In Advice Letter 5498-E, the joint utilities argued that the metrics proposed in the Decision were not, on their own, well-suited to measure equity, as they primarily identify and map the types and demographics of customers connected to each circuit. Accordingly, rather than adopting the CPUC-proposed metrics as written, the Joint Utilities proposed metrics that differ from those proposed by the Commission, with SDG&E proposing a different set than PG&E and SCE. This Resolution evaluates each utility proposal in the context of the others.

SDG&E's proposal included:

- Treatment of the five CPUC-proposed metrics as data variables rather than standalone metrics, to be used as inputs for equity assessments in combination with forecasting and distribution project-related data.
- A definition of Disadvantaged Communities (DACs) using the five customer types from the Decision, SB 535<sup>1</sup> Priority Populations (including CalEnviroScreen 4.0), Low Income, Tribal, CARE/FERA, and Medical Baseline, consistent with the Electrification Impact Study Part 2, with circuits designated as DAC or non-DAC using a binary approach.
- A “Load Growth” metric reported in the GNA that measures the proportion of DER-based load growth forecast for DAC circuits compared to non-DAC circuits.
- A “Project Initiation” metric reported in the DUPR that measures the proportion of upstream distribution capacity upgrade projects initiated on DAC circuits compared to non-DAC circuits, with project initiation defined as the date scoping or solutioning is completed.

PG&E and SCE's joint proposal included:

- Two metrics, each calculated across four customer groups [CARE/FERA, Disadvantaged Communities (DAC-SB 535), Tribal Communities, and Medical Baseline], and for the system as a whole as a point of comparison. PG&E and SCE consolidated the DAC and Priority Populations designations into a single group, treating the two as equivalent.
- A Grid Access metric measuring available headroom per circuit (circuit capacity rating minus circuit peak loading) for Year 1 (current) and Year 5 (forecast), using a

---

<sup>1</sup> SB 535 (De Leon, Chapter 830, Statutes of 2012)

linear regression model to determine whether a statistically meaningful correlation exists between available headroom and the number of customers in each group.

- A “Project Initiation” metric measuring the ratio of Planned Investments (funded projects) to total identified projects (Planned Investments plus Planned Solutions) for each customer group, using a linear regression model to determine whether a statistically meaningful correlation exists between project initiation status and the number of customers in each group.
- Reporting of the Grid Access data in the GNA and the Project Initiation data in the DUPR, identifying as example reporting locations existing appendices submitted as confidential (e.g., PG&E's GNA Bank and Feeder appendix and DUPR Planned Investment appendix), with regression metric results to be included in the narrative document.

## **NOTICE**

Notice of AL 5498-E et al. was made by publication in the Commission's Daily Calendar. SCE states that copies of the Advice Letter were mailed and distributed in accordance with General Rule 4 of General Order 96-B, serving the GO 96-B and R.21-06-017 service lists.

## **PROTESTS AND REPLIES**

AL 5498-E et al. was timely protested on March 20, 2025, by Vote Solar and the Center for Biological Diversity (Vote Solar/CBD), and on March 27, 2025, by the Joint Community Choice Aggregators (Joint CCAs), consisting of Ava Community Energy, Marin Clean Energy, Redwood Coast Energy Authority, and Valley Clean Energy, and by the Center for Accessible Technology (CforAT). SCE, on behalf of itself, PG&E, and SDG&E, filed reply comments to all protests on April 4, 2025.

The following summarizes the major issues raised in the protests and the joint utilities' replies.

## **Compliance with D.24-10-030 and OP 25**

The Joint CCAs argued that the Joint Utilities' proposed metrics deviate from the five metrics explicitly enumerated in OP 25, characterizing the workshop and Tier 3 AL process as designed to refine and finalize the Commission-identified metrics with stakeholder input, rather than replace them. They contended that by proposing alternative metrics (SDG&E's “Load Growth” and “Project Initiation”; and

PG&E/SCE's "Grid Access" and "Project Initiation"), the Joint Utilities violated D.24-10-030 and urge the Commission to reject the ALs as submitted or require substantial modifications.<sup>2</sup> Vote Solar/CBD similarly asserted that the Joint Utilities are "required" to track and evaluate the five equity metrics referenced in the Decision.<sup>3</sup>

**Joint IOU Reply:** <sup>4</sup> The Joint Utilities responded that OP 25 does not mandate adoption of the five listed metrics verbatim but rather directs the utilities to hold a workshop for "further exploration" of those metrics and their correlated variables. The Decision contemplates that the Commission may ultimately adopt different metrics, with the final adopted set to be determined by the Commission's resolution on the Tier 3 ALs. The Joint Utilities further noted that the five metrics were in fact explored as directed at the January 21, 2025, workshop, and modifications were proposed accordingly, constituting no violation of a Commission order. The Decision also explicitly states that "additional stakeholder input is required to ensure that the appropriate correlated variables are taken into account," confirming the flexibility the Joint Utilities exercised.

## Consolidation and Redefinition of CPUC-Proposed Metrics

The Joint CCAs argued that the Joint Utilities redefine, consolidate, or replace (rather than refine) each of the five Commission-identified metrics.<sup>5</sup> Specifically:

- No standalone CARE/FERA percentage is reported at the circuit level; and the CalEnviroScreen percentile score is reduced to a binary DAC threshold rather than reported on a continuous scale;
- DAC and Priority Populations designations are improperly merged into one;
- Tribal community status is subsumed into SDG&E's broad DAC circuit designation; and Medical Baseline enrollment is not reported as a standalone percentage.

CforAT raised related concerns about SDG&E's binary DAC/non-DAC classification, arguing it may obscure meaningful distinctions between communities and customer groups.<sup>6</sup>

**Joint IOU Reply:** The Joint Utilities responded that the SB 535 Priority Populations designation includes CalEnviroScreen 4.0 DACs, making a separate metric for each duplicative and inefficient, and that nowhere in D.24-10-030 has the Commission

---

<sup>2</sup> Joint CCAs Protest to AL 5498-E et al., pp. 1–2, 8.

<sup>3</sup> Vote Solar/CBD Protest to AL 5498-E et al., p. 2.

<sup>4</sup> Joint IOU Reply to Protests of AL 5498-E et al., pp. 2–3.

<sup>5</sup> Joint CCAs Protest to AL 5498-E et al., pp. 4–5.

<sup>6</sup> CforAT Protest to AL 5498-E et al., pp. 2–4.

mandated specific data points to be tracked independently. The Decision contemplates the possibility that different equity metrics will ultimately be adopted, and nothing prohibits the Joint Utilities from using the five metrics as inputs into their proposed metrics rather than reporting each independently. The Joint Utilities further noted that for SDG&E's "Project Initiation" metric, customer group data, including CARE/FERA, Medical Baseline, Tribal, and Priority Populations customer counts, will be provided at the circuit level for each DUPR-identified project.<sup>7</sup>

## Proposed Metrics and Methodology

### Regression Methodology and Cross-Group Comparability:

The Joint CCAs argued that PG&E/SCE's regression-based metrics are misleading and prone to misinterpretation. The Joint CCAs contended that the Commission intended the utilities to compare available capacity across different customer groups, but that the regression analysis instead evaluates whether the number of customers within a group correlates with available headroom or project initiation, measuring equity within a group rather than between groups. The Joint CCAs further argued that PG&E/SCE fail to report customer data as a percentage at the circuit level.<sup>8</sup>

***PG&E/SCE Reply:*** PG&E and SCE responded that the Joint CCAs mischaracterized the proposed metrics as consisting solely of regression models. The proposal also calculates available headroom for each circuit and identifies project initiation at the project level, with customer count data to be reported at the circuit level in the 2026-2027 GNA/DUPR filings. PG&E and SCE further respond that the regression analysis assesses whether the number of customers within each customer group correlates with headroom or project initiation, ensuring an objective and unbiased analysis that recognizes customer groups vary in size, behavior, and capacity needs.<sup>9</sup>

### SDG&E's "Load Growth" Metric and IEPR Reliance:

Vote Solar/CBD raised concerns about SDG&E's "Load Growth" metric's reliance on the IEPR forecast, noting that the IEPR is based on historical data, does not optimize existing DER assets, and excludes organic growth, which could cause issues in mitigating DER growth above forecasted adoption rates. Vote Solar/CBD recommended SDG&E consider the impact of strategically controlling existing solar and storage capacity to alleviate grid congestion.<sup>10</sup>

---

<sup>7</sup> Joint IOU Reply to Protests of AL 5498-E et al., pp. 3–4, 7.

<sup>8</sup> Joint CCAs Protest to AL 5498-E et al., pp. 3–4, 7.

<sup>9</sup> Joint IOU Reply to Protests of AL 5498-E et al., pp. 9–10.

<sup>10</sup> Vote Solar/CBD Protest to AL 5498-E et al., p. 2.

**SDG&E Reply:** SDG&E responded that it is unclear how solar and storage capacity would be "controlled" as Vote Solar/CBD suggests, and assumed the recommendation refers to the long-term load management framework being considered in the High DER proceeding, which has no immediate relevance to the equity metrics proposed. SDG&E does not believe its "Load Growth" metric needs to be modified in response.<sup>11</sup>

## Definition of Equity in Distribution Planning

### Definition of Equitable Access and Timely Manner:

Vote Solar/CBD raised concerns about the Joint Utilities' interpretation of equity as "equitable access to distribution service for historically at-risk communities, based on income, geography, race, ethnicity, or health condition," drawn from Professor Duncan Callaway's presentation at the workshop. Vote Solar/CBD argued that equitable access requires prioritization where unequal access is present, and that the phrase "as the need arises" could be used to defer necessary grid investment. Vote Solar/CBD recommended the Commission establish a timeline to define "timely manner," particularly for circuits with lower headroom in low-income communities.<sup>12</sup>

**PG&E/SCE Reply:** PG&E and SCE responded that Vote Solar/CBD's view that the need for capacity already exists across California is not a consensus position and has not been substantiated with data across customer groups. PG&E and SCE further noted that the Energization proceeding (R.24-01-018) is already considering timelines, making a separate definition of "timely manner" in this proceeding redundant, and that a universal headroom threshold trigger would likely generate unnecessary projects and be an inefficient use of ratepayer funds.<sup>13</sup>

### DAC Map Layer in ICA and GRIP Maps:

Vote Solar/CBD recommended that the IOUs take immediate action to incorporate the CalEnviroScreen 4.0 Disadvantaged Community map as a layer in the ICA maps and the Grid Resource Integration Portal (GRIP) map, arguing this would enable real-time identification of planning gaps on DAC circuits more effectively than querying the DUPR annually.<sup>14</sup>

**SCE Reply:** SCE noted that several needs must be assessed before integrating the map layer, including determining the exact data to be extracted, confirming whether the data

---

<sup>11</sup> Joint IOU Reply to Protests of AL 5498-E et al., p. 5.

<sup>12</sup> Vote Solar/CBD Protest to AL 5498-E et al., pp. 4–5.

<sup>13</sup> Joint IOU Reply to Protests of AL 5498-E et al., pp. 8–9.

<sup>14</sup> Vote Solar/CBD Protest to AL 5498-E et al., p. 3.

is open-sourced, establishing documentation and user guides, and determining a data refresh cadence.<sup>15</sup>

***PG&E/SCE Reply:*** PG&E indicated it plans to incorporate a DAC layer in its ICA and GRIP maps in the near term but noted that ICA implementation and equity metrics implementation in the 2026-2027 DPP cycle are independent. PG&E and SCE stated that once clear direction is provided on the specific data to be incorporated, they will consider whether this integration is feasible for their external portals.<sup>16</sup>

### Medical Baseline Customer Group Scope:

CforAT requested that the IOUs confirm that the Medical Baseline customer group includes customers receiving a medical discount if enrolled in an opt-in un-tiered rate, as explicitly required by OP 25.<sup>17</sup>

***Joint IOU Reply:*** SDG&E, PG&E, and SCE confirmed that the Medical Baseline group will consist of customers enrolled in the Medical Baseline Program, including those receiving either a discount or an additional baseline allotment, depending on the IOU.<sup>18</sup>

## DISCUSSION OF PROTESTS AND REPLIES

The Commission has reviewed AL 5498-E et al., the protests, and the replies, and directs the following modifications as described below. For clarity, this Discussion section begins with an overview, followed by a point-by-point response to the issues raised in the Protests section.

### 1. Overview

The Commission has considered the proposals of the Joint Utilities and the protests of Vote Solar/CBD, the Joint CCAs, and CforAT, and finds that the Joint Utilities' proposed metrics, while responsive to OP 25 of D.24-10-030, require modifications to ensure cross-utility comparability, analytical rigor, and alignment with the Commission's requirement for annual evaluation of equity in distribution planning as directed in OP 25 of D.24-10-030.

The Commission finds that the five equity-priority metrics identified in OP 25 of D.24-10-030, together with the metrics proposed by the Joint Utilities in AL 5498-E et al.,

---

<sup>15</sup> Joint IOU Reply to Protests of AL 5498-E et al., pp. 7–8.

<sup>16</sup> Joint IOU Reply to Protests of AL 5498-E et al., p. 8.

<sup>17</sup> CforAT Protest to AL 5498-E et al., pp. 4–5.

<sup>18</sup> Joint IOU Reply to Protests of AL 5498-E et al., p. 5.

shall serve as the foundation for equity analysis in the Distribution Planning and Execution Process (DPEP). The five OP 25 metrics: (1) CARE/FERA enrollment, (2) CalEnviroScreen 4.0 Priority Populations percentile, (3) DAC status, (4) Tribal community status, and (5) Medical Baseline enrollment, shall define the equity-priority populations to be tracked. The Joint Utilities' proposed metrics, "Load Growth," "Available Headroom," and "Project Initiation" shall inform the analytical framework for evaluating equity outcomes in distribution planning, subject to the modifications described in this Resolution.

The methodological framework for evaluating those metrics shall be developed and implemented by Energy Division. Results shall be presented in an annual *Equity Metrics in the Distribution Planning and Execution Process Report* (Equity Metrics in DPEP Report), which will include the econometric models, results, and interpretation for all three IOUs. The first 'Equity Metrics in DPEP Report' is expected to be delivered in the third quarter of 2027, reflecting data from the 2026-2027 DPEP cycle. In subsequent years, the 'Equity Metrics in DPEP Report' shall be delivered in the first quarter of each calendar year, reflecting data from the prior year's DPEP cycle; for example, the second 'Equity Metrics in DPEP Report', reflecting data from the 2027-2028 DPEP cycle (GNA/DUPR data received beginning August 2027), is expected to be delivered in Q1 of 2028. IOUs shall provide required input data and summary statistics annually through their GNA and DUPR filings, and Energy Division shall conduct econometric modeling, prepare the annual 'Equity Metrics in DPEP Report', and publish outcomes for all IOUs and the public. This approach ensures the highest degree of analytical consistency, cross-utility comparability, and transparency in the annual evaluation of equity in distribution planning.

## 2. Compliance with D.24-10-030 and Scope of OP 25

The Joint CCAs and Vote Solar/CBD argued that the Joint Utilities violated D.24-10-030 by proposing alternative metrics rather than adopting the five metrics enumerated in OP 25 verbatim. The Commission disagrees.

OP 25 of D.24-10-030 directs the Joint Utilities to hold a workshop for "further exploration" of the equity metrics and their correlated variables, and to subsequently submit a Tier 3 Advice Letter requesting approval of a "final set of metrics and any correlated variables." The Decision explicitly recognizes that "additional stakeholder input is required to ensure that the appropriate correlated variables are taken into account when analyzing the metrics and equity." This language reflects the Commission's intent that the workshop and Tier 3 AL process serve as a mechanism for

refining and finalizing the equity metrics framework, not as a mandate to adopt the five OP 25 metrics without modification.

The Commission finds that the Joint Utilities complied with OP 25's procedural requirements by holding the required workshop on January 21, 2025, considering the metrics in OP 25, and submitting AL 5498-E et al. requesting approval of a final set of metrics within the required 45-day period. The Commission further finds that the five metrics identified in OP 25 were thoroughly explored at the workshop, as required. Accordingly, the Commission determines that no violation of D.24-10-030 occurred.

However, the Commission finds that the Joint Utilities' proposed metrics, as submitted, are not sufficient on their own to satisfy the directive in Decision 24-10-030 for tracking and annually evaluating equity in distribution planning. As described in the sections below, the Commission adopts a modified framework incorporating both the OP 25 metrics and the Joint Utilities' proposed metrics, with Energy Division leading development and implementation of a consistent, cross-utility analytical methodology.

### 3. Consolidation and Redefinition of CPUC-Proposed Metrics

The Joint CCAs and CforAT argued that the Joint Utilities' proposals fail to directly report each of the five metrics enumerated in OP 25, and that by consolidating or redefining those metrics, particularly the merging of the CalEnviroScreen Priority Populations percentile with the DAC yes/no designation, and the subsuming of CARE/FERA, Tribal, and Medical Baseline customers into a broad binary DAC classification under SDG&E's approach, the Joint Utilities deviated from the Commission's explicit directives.

The Commission agrees that the Joint Utilities' proposals, as submitted, do not fully preserve the granularity and specificity of the five OP 25 metrics. The Commission finds that each of the five metrics identified in OP 25 serves a distinct analytical purpose and shall be reported independently, with standardized definitions applied consistently across all three IOUs. Energy Division shall establish those standardized definitions and reporting requirements, as further described in Sections 4 and 7 of this Resolution.

The Commission finds that the modifications adopted herein address the concerns raised by the Joint CCAs and CforAT regarding the granularity and completeness of the equity metrics framework.

## 4. Equity-Priority Populations in the DPEP

For the purposes of the equity metrics framework adopted in this Resolution, the Commission establishes the following definitions of equity-priority populations to be tracked and reported in the DPEP. These populations correspond to the five metrics identified in OP 25 of D.24-10-030 and shall serve as the independent variables in the econometric models developed by Energy Division.

The equity-priority populations are:

- **CARE customers:** Customers enrolled in the California Alternate Rates for Energy (CARE) program, identified through IOU customer account data and reported as a percentage of total customers on the circuit or project area.
- **FERA customers:** Customers enrolled in the federal Family Electric Rate Assistance (FERA) program, identified through IOU customer account data and reported as a percentage of total customers on the circuit or project area.
- **Medical Baseline customers:** Customers enrolled in the Medical Baseline program or receiving an equivalent medical discount in an opt-in rate without tiers, identified through IOU customer account data and reported as a percentage of total customers on the circuit or project area.
- **Tribal population customers:** Customers that are members of a Tribal community, identified through CalEPA's DAC designations or equivalent Tribal land mapping, and reported as a percentage of total customers on the circuit or project area.
- **Disadvantaged Community (DAC) customers:** Customers located within a census tract designated as a Priority Population under SB 535, based on CalEnviroScreen 4.0 (or the most recent version at the time of filing). DAC status is determined at the customer level by mapping each customer's service address to its associated census tract. For each circuit, the DAC percentage is calculated as the number of DAC-designated customers divided by the total number of customers on the circuit.

The Commission finds that each of these five populations is analytically distinct and shall be tracked and reported independently. The DAC designation (based on census tract-level CalEnviroScreen 4.0 data under SB 535) is a geographically defined classification that is conceptually and methodologically distinct from the program-based designations of CARE, FERA, Medical Baseline, and Tribal populations. A customer may simultaneously belong to more than one equity-priority population; for example, a CARE customer may also reside in a DAC census tract, but each population shall be measured and reported through its own separate variable.

Accordingly, customers served by circuits that fall within a DAC-designated census tract shall not be added to the counts of customers enrolled in CARE, FERA, Medical Baseline, or who are members of a Tribal community to form a larger combined population. Doing so would combine two different types of equity designations, one geographic, one program-based, and would risk inflating population estimates, double-counting individual customers who belong to more than one group and obscuring the distinct equity conditions each population is independently intended to capture.

Each equity-priority population shall be reported as a separate percentage of total customers at the circuit level, consistent with the data requirements established in Section 7 of this Resolution.

## 5. Equity Metrics Methodology and ED-Led Modeling

The Commission finds that a consistent, cross-utility analytical methodology is essential to achieving the equity tracking objectives of D.24-10-030. The Commission therefore adopts an Energy Division-led modeling framework in which the IOUs annually provide required input data and summary statistics through their GNA and DUPR filings, and Energy Division conducts econometric modeling and reports results for all three IOUs in the annual “Equity Metrics in DPEP Report.”

The Commission finds that this approach best supports analytical consistency, cross-utility comparability, and transparency, and that it appropriately preserves Commission oversight over model design, validation, and interpretation during the initial years of implementation. The Commission delegates to Energy Division the authority to refine the models as data quality and understanding of the equity metrics framework evolves over time.

The Commission adopts an initial econometric framework consisting of three models to evaluate equity across the five equity-priority populations defined in Section 4 of this Resolution. These models are intended to serve as screening tools to identify statistically meaningful disparities in equity outcomes. The models operate at two levels of analysis, circuit-level and project-level, and are described below.

### 5.1 Load Growth Regression (Circuit-Level)

The Load Growth regression evaluates whether circuits serving higher proportions of equity-priority populations experience different levels of load growth relative to other circuits. The model shall be estimated at the circuit level using a multiple linear

regression or other statistically appropriate specification selected by the Energy Division.

The general form of the model is:

$$\text{Load Growth}_i = \beta_0 + \beta' \text{Equity Variables}_i + \gamma' \text{Controls}_i + \varepsilon_i$$

Where “Load Growth” represents the forecasted or measured load increase on the circuit, expressed in MW, percentage terms or another normalized form; Equity Variables include circuit-level equity-priority population measures defined in Section 4 (including CARE, FERA, Medical Baseline, Tribal, and DAC variables); Controls shall include relevant planning, engineering, demographic, and operational variables; and  $\varepsilon_i$  is the error term.

## 5.2 Available Headroom Regression (Circuit-Level)

The Available Headroom regression assesses whether circuits serving higher proportions of equity-priority populations experience differences in access to available grid capacity.

The model shall be estimated at the circuit level using a multiple linear regression or other statistically appropriate specification selected by the Energy Division.

The general form of the model is:

$$\text{Headroom Available}_i = \beta_0 + \beta' \text{Equity Variables}_i + \gamma' \text{Controls}_i + \varepsilon_i$$

Where Available Headroom is the available electrical capacity on the circuit, calculated as the difference between the circuit capacity rating and circuit peak loading, measured at Year 1 (current) and Year 5 (forecast); Equity Variables include circuit-level equity-priority population measures defined in Section 4; Controls shall include relevant planning, engineering, demographic, and operational variables; and  $\varepsilon_i$  is the error term.

## 5.3 Project Initiation Regression (Project-Level)

The Project Initiation regression estimates whether equity-priority populations are associated with differences in the likelihood of project initiation after accounting for planning need and relevant project characteristics. The model shall be estimated using

logistic regression or another statistically appropriate classification method selected by Energy Division.

The general form of the model is:

$$\text{Logit}(\text{Project Initiated} = 1) = \beta_0 + \beta' \text{Equity Variables}_i + \gamma' \text{Controls}_i + \varepsilon_i$$

Where Project Initiated is a binary indicator reflecting whether a project has been initiated according to the utility's documented criteria; Controls include relevant planning, engineering, demographic, operational, and project-level variables; and  $\varepsilon_i$  is the error term. Final control variables shall be selected by Energy Division based on data diagnostics, correlation testing, and robustness checks; where control variables such as project size (MW) and estimated cost are highly correlated, Energy Division may use alternative specifications, including normalized measures such as cost per MW.

#### 5.4 Model Results and Documentation

For each regression model, Energy Division shall prepare and publish the following outputs as part of the annual 'Equity Metrics in DPEP Report': estimated coefficients and standard errors for each variable; p-values for each coefficient; R-squared values for the Load Growth and Available Headroom models; pseudo R-squared values for the Project Initiation model; sample size; results of diagnostic testing, including multicollinearity assessments where appropriate; and a narrative summary of model results, interpretation guidance, and description of assumptions and data limitations. The narrative summary shall include guidance on the interpretation of coefficient estimates for equity-priority variables, including the circumstances under which results warrant further review.

Because the regression models estimate average relationships across the full sample, Energy Division may, where data completeness and sample size permit, supplement regression results with complementary analytical approaches, such as circuit comparison, scoring, matched comparison groups, or propensity score methods, to assess whether equity-priority circuits or projects with similar planning characteristics receive comparable planning treatment relative to otherwise similar circuits or projects. Identification of a circuit or project through such analysis does not constitute a determination of inequity but may indicate that additional review is warranted.

## 6. Definition of Equity in Distribution Planning

### 6.1 Interpretation of Equitable Access and Timely Manner

Vote Solar/CBD raised concerns about the Joint Utilities' interpretation of equity in distribution planning as "equitable access to distribution service for historically at-risk communities, based on income, geography, race, ethnicity, or health condition," and specifically about the phrase "as the need arises" as a basis for determining when distribution capacity upgrades should occur.<sup>19</sup> Vote Solar/CBD argued that the need for capacity upgrades already exists across California, and recommended the Commission establish a timeline to define what constitutes a timely manner for grid upgrades, particularly for circuits with lower headroom in low-income communities.

The Commission finds that having a definition of equitable access is helpful and we draw upon the presentation by PhD. Duncan Callaway at the January 21, 2025 "Equity Metrics" workshop.<sup>20</sup> We agree with his useful observations that "Equitable access [means] access (ability to connect, time to wait for the ability) is independent of factors like race, ethnicity, income and linguistic isolation." Additionally, we concur that equitable access in distribution planning means that "projects that get approved and built are used and useful, this contains ratepayer costs while ensuring access. [Utilities] take measure to ensure they can respond to a range of future DER and load adoption scenarios and maintain equitable access." A fundamental principle is that "Equitable access does not mean all customers have access to the same capacity for new load... but distribution companies must build new capacity as need arises."

Based on this perspective we adopt a definition that draws on some of his phrasing and is finalized here:

"Equitable access in distribution planning means that connection ability and time to wait for connection are independent of race, ethnicity, income, linguistic isolation, and other demographic criteria. Utilities must take measures to respond to a range of future DER and load adoption scenarios while building new capacity consistently across all customer populations, as needs arise; this does not mean that all customers have access to equal capacity for new load."

The Commission clarifies that this definition does not modify the utility planning process, as equity metrics are evaluation tools and not planning criteria.

---

<sup>19</sup> Vote Solar & Center for Biological Diversity. (2025, March 20). Protest to joint investor-owned utilities request for approval of final set of equity metrics to measure equity in distribution planning [Protest to SCE AL 5498-E, PG&E AL 7530-E, SDG&E AL 4617-E]. California Public Utilities Commission, Rulemaking 21-06-017. Page 4.

<sup>20</sup> PhD. Duncan Callaway presentation.

The Commission agrees with Vote Solar/CBD that equitable access requires both that equity-priority populations have access to distribution capacity when needs arise, and that disparities in access be identified. Equity metrics help quantify and measure objectively whether any disparities in access exist. Accordingly, the Commission finds that establishing a specific timeline for addressing grid upgrades in a "timely manner" in this proceeding would be duplicative of work already underway in the Energization proceeding (R.24-01-018) and declines to do so here. The Commission expects that the annual 'Equity Metrics in DPEP Report,' by identifying statistically meaningful correlations between equity-priority populations and available headroom or project initiation, will provide useful information.

## 6.2 DAC Map Layer in ICA and GRIP Maps

Vote Solar/CBD recommended that the Commission require the IOUs to incorporate the CalEnviroScreen 4.0 Disadvantaged Community map as a layer in the ICA maps and the Grid Resource Integration Portal (GRIP) map, arguing this would enable real-time identification of planning gaps on DAC circuits.

The Commission declines to adopt this recommendation. The ICA maps and IOU data portals are designed specifically to support DER siting and interconnection, providing contractors and developers with information about where existing grid infrastructure has capacity to connect new DERs. Incorporating a DAC equity population layer into these tools would conflate two distinct purposes, grid capacity visibility for DER developers and equity population mapping for distribution planning oversight and is outside the scope of the ICA maps and data portals as established in this proceeding.

The Commission finds that the annual 'Equity Metrics in DPEP Report' adopted in this Resolution is the appropriate vehicle for communicating equity outcomes to the public and stakeholders. The 'Equity Metrics in DPEP Report' will provide transparent, publicly available results of the econometric models described in Section 5, including circuit-level analysis of the relationship between equity-priority populations and available headroom and project initiation across all three IOUs. The Commission finds that this approach better serves the equity transparency objectives of D.24-10-030 than the addition of a map layer to tools designed for a different purpose.

## 6.3 Medical Baseline Customer Group Scope

CforAT requested confirmation that the Medical Baseline customer group includes customers receiving a medical discount if enrolled in an opt-in un-tiered rate, as explicitly required by OP 25. The Joint Utilities confirmed in their reply that the Medical Baseline group consists of customers enrolled in the Medical Baseline Program,

including those receiving either a discount or an additional baseline allotment depending on the IOU.

The Commission finds that the Medical Baseline customer group, for purposes of the equity metrics framework adopted in this Resolution, shall include all customers enrolled in the Medical Baseline Program, as well as customers receiving an equivalent medical discount if enrolled in an opt-in rate that does not include tiers, consistent with the language of OP 25 in D.24-10-030. IOUs shall ensure that their customer account data submitted pursuant to Section 7 of this Resolution reflects this definition.

## 7. IOU Data Requirements and Reporting Timeline

To support the Energy Division-led modeling framework adopted in this Resolution, the Commission requires PG&E, SCE, and SDG&E to provide annual input data and summary statistics through their existing GNA filings as a separate appendix titled "Equity Metrics Statistics." The data requirements established herein are intended to ensure cross-utility comparability and to provide Energy Division with the information necessary to develop, validate, and report the econometric models described in Section 5 of this Resolution. The data template attached to this Resolution as Attachment A establishes the required fields, definitions, and structure for both circuit-level and project-level submissions.

### 7.1 Circuit-Level Data: GNA - Equity Metrics Statistics Appendix (Attachment A, *Circuit\_Data* tab)

IOUs shall report the following fields for each circuit in their service territory, as specified in the "Circuit\_Data" tab of Attachment A of this resolution, and shall submit the completed *Circuit\_Data* table as a separate appendix to the annual GNA filing, titled "Equity Metric Statistics," consistent with Ordering Paragraph 8. The field names in parentheses correspond to the column headers in Attachment A:

- a) Utility name and service territory, planning area, county, city, ZIP code, circuit identifier and name, and substation identifier (*Utility\_or\_Service\_Territory*, *Planning\_Area*, *County*, *City*, *ZIP\_Code*, *Circuit\_ID*, *Circuit\_Name*, *Substation\_ID*);
- b) Reporting year and data type (*Year*; *Data\_Type*, reported as Actual, Forecast, Planned, or Estimated);
- c) Forecasted peak load and forecasted load growth, reported as the anticipated increase in electrical demand based on planning inputs such as IEPR forecasts and used to anticipate future infrastructure needs for the next planning cycle (*Forecast\_Peak\_Load\_MW*, *Load\_Growth\_MW*, *Load\_Growth\_Pct*). The Commission

clarifies that load growth reporting shall reflect forecasted figures, consistent with the purpose of the equity metrics framework, which is to evaluate the distribution planning process and not operational or post-planning performance;

- d) Available headroom at Year 1 and Year 5 (*Available\_Headroom\_MW\_Y1*, *Available\_Headroom\_MW\_Y5*), calculated as the difference between the circuit's capacity rating and its forecasted peak load at each planning horizon. The Commission clarifies that available headroom shall also reflect forecasted conditions, including expected load growth, rather than historical or operational measurements. Year 5 headroom shall reflect planned system conditions at that future point in time, inclusive of planned investments already incorporated into the planning cycle. The Commission notes that because PG&E and SCE incorporate planned investments into their Year 5 headroom figures, while SDG&E's methodology may differ, Energy Division shall document any cross-utility methodological differences in the annual 'Equity Metrics in DPEP Report' and account for them in the interpretation of model results;
- e) Supporting circuit characteristics, including historical annual peak load, reported as a reference baseline and not used as a primary model input (*Annual\_Peak\_Load\_MW*), annual energy served (*Annual\_Energy\_MWh*), and circuit capacity ratings (*Planning\_Capacity\_MW*, *Normal\_Rating\_MW*, *Emergency\_Rating\_MW*);
- f) Total customer count, and customer counts by customer type (*Customers\_Total*, *Residential\_Customers*, *Commercial\_Customers*, *Industrial\_Customers*, *Agriculture\_Other\_Customers*);
- g) Number and percentage of customers enrolled in CARE, FERA, Medical Baseline, and Tribal programs, each reported independently and as a percentage of total circuit customers, consistent with Section 4 of this Resolution (*CARE\_Customers*, *CARE\_Pct\_of\_Total*, *FERA\_Customers*, *FERA\_Pct\_of\_Total*, *Medical\_Baseline\_Customers*, *Medical\_Baseline\_Pct\_of\_Total*, *Tribal\_Customers*, *Tribal\_Pct\_of\_Total*);
- h) Counts of customers enrolled in more than one equity program, reported for each program combination specified in Attachment A (e.g., customers enrolled in both CARE and Medical Baseline), to support analysis of overlap across equity-priority populations and to inform the interpretation of model results (*CARE\_MED*, *FERA\_MED*, *CARE\_Tribal*, *FERA\_Tribal*, *MED\_Tribal*, *CARE\_MED\_Tribal*, *FERA\_MED\_Tribal*);
- i) Percentage of customers located within a DAC-designated census tract, consistent with SB 535 and CalEnviroScreen 4.0 (or the most recent version at the time of filing), along with a methodology note describing the approach used to

estimate DAC populations at the circuit level (*DAC\_Pct\_of\_Total*, *DAC\_Methodology\_Notes*);

- j) A notes field documenting definitions, data limitations, approximations, or other comments relevant to the interpretation of the submitted data, including an explanation for any field left blank due to data unavailability (*Notes*).

## 7.2 Project-Level Data: DUPR - Equity Metrics Statistics Appendix (Attachment A, *Project\_Data* tab)

IOUs shall report the following fields for each distribution upgrade project, as specified in the "Project\_Data" tab of Attachment A to this Resolution, and shall submit the completed Project\_Data table as a separate appendix in their annual DUPR filing, titled "Equity Metrics Statistics," consistent with Ordering Paragraph 8:

- a) Project identifier, circuit-to-project mapping listing all circuits affected by the project, utility name, planning area, and reporting year (*Project\_ID*, *Circuit\_to\_Project Mapping*, *Circuit\_Name*, *Utility\_or\_Service\_Territory*, *Planning\_Area*, *Year*);
- b) Project type and status (*Project\_Type*; *Project\_Status*, reported as Proposed, Approved, Initiated, Completed, Deferred, or Rejected), proposal date, approval date, initiation date, and completion date where available (*Proposal\_Date*, *Approval\_Date*, *Initiation\_Date*, *Completion\_Date*);
- c) Estimated and actual project cost, MW capacity added, project driver, and constraint addressed (*Estimated\_Cost*, *Actual\_Cost*, *MW\_Capacity\_Added*, *Project\_Driver*, *Constraint\_Addressed*);
- d) Project initiation status, reported as a binary Yes/No indicator of whether the project has been initiated, along with a note documenting the IOU's definition of "initiated" for purposes of cross-utility comparability (*Initiated\_Project*, *Initiated\_Project\_Notes*);
- e) Whether the project was deferred or rejected, the reason for any deferral or rejection, and whether the project is included in the IOU's distribution planning documents, to support identification of non-initiated outcomes in the "Project Initiation" model (*Deferred\_or\_Rejected\_Flag*, *Deferral\_or\_Rejection\_Reason*, *Included\_In\_Distribution\_Plan*); and
- f) A notes field documenting definitions, data limitations, approximations, or other comments relevant to the interpretation of the submitted data, including an explanation for any field left blank due to data unavailability (*Notes*).

Through the circuit-to-project mapping field, Energy Division will cross-reference project-level data with the circuit-level equity-priority population data reported in the

GNA Equity Metrics Statistics appendix to estimate the equity-priority population characteristics of each project area. IOUs are not required to independently calculate equity-priority population percentages at the project level.

### 7.3 Reporting Timeline

The Commission finds that the submission of equity metrics input data shall be submitted in three phases. The 2025-2026 GNA and DUPR data, filed on August 16, 2026, shall be submitted in the format of Attachment A no later than October 16, 2026. Historical data for the GNA and DUPR (previously DDOR<sup>21</sup>) filings of the years 2019-2025 shall be submitted in the format of Attachment A no later than December 31, 2026. The content of historic data provides statistical tools to analyze behavior of the variables involved and provides a broader context for the eventual interpretation of results. This timeline allows Energy Division sufficient time to develop, test, and validate the econometric models in advance of the draft for the 'Equity Metrics in DPEP Report,' expected in the third quarter of 2027. Both submissions shall be consistent with the data fields specified in Attachment A and shall reflect the forecasted data previously reported in past GNA and DUPR filings for the periods covered.

In subsequent years, equity metrics input data shall be submitted as part of the IOUs' regular GNA and DUPR filings, on the same schedule as those filings, with the GNA Equity Metrics Statistics appendix due on the same date as the GNA filing. For each subsequent submission, IOUs shall provide the forecasted data reported in the current GNA and DUPR filings for the applicable planning cycle, covering the same years and planning horizon as those filings.

Energy Division shall publish the annual 'Equity Metrics in DPEP Report' in the first quarter of each calendar year, reflecting data from the prior year's DPEP cycle, as described in the Overview section of this Resolution. The first official Equity Metrics in DPEP Report is expected in the first quarter of 2028, reflecting data from the 2026-2027 DPEP cycle (GNA and DUPR filings submitted in August 2027).

Table 1. Data submission phases

| Submission Phase | Data Coverage | Deadline | Purpose |
|------------------|---------------|----------|---------|
|------------------|---------------|----------|---------|

<sup>21</sup> The Distribution Deferral Opportunity Report (DDOR) was renamed Distribution Project Upgrade Report (DUPR) in D.24-10-030.

|         |                                                   |                    |                                      |
|---------|---------------------------------------------------|--------------------|--------------------------------------|
| Phase 1 | 2025-2026<br>GNA/DUPR (filed<br>Aug 16, 2026)     | October 16, 2026.  | Model development<br>and validation. |
| Phase 2 | Historical data<br>(GNA submissions<br>2019-2025) | December 31, 2026. | Model development<br>and validation. |
| Phase 3 | 2026-2027<br>GNA/DUPR<br>(regular 2027 cycle)     | August 16, 2027.   | First official report<br>data.       |

Energy Division shall use data from Phases 1 and 2 to develop, test and validate the econometric models, and shall prepare a draft Equity Metrics in DPEP Report expected in the third quarter of 2027. Following receipt of Phases 3 data in August 2027, Energy Division shall prepare the first official Equity Metrics in DPEP Report for publication in Q1 2028.

Energy Division is authorized to modify the content requirements of the GNA Equity Metrics Statistics appendix, including the data fields, definitions, and structure specified in Attachment A to this Resolution, as needed to support of the annual modeling cycle, consistent with the Commission's oversight responsibilities under D.24-10-030. As the econometric models are developed, validated, and refined over future DPEP cycles, the data required to support them may also evolve. Therefore, we authorize Energy Division to update Attachment A to ensure that data collection remains aligned with the models without requiring a new Commission resolution for each incremental change.

The Commission further clarifies that, for each annual submission, all forecast and planned data (including forecasted peak load, forecasted load growth, and Year 1 and Year 5 available headroom) shall reflect the forecast and planned figures developed for and presented in that filing covering that filing's forecast horizon. Forecast or planned figures carried over from a prior year's GNA or DUPR shall not be substituted for the current filings' figures. The phase 1 and 2 submissions are the sole exception, as the phases necessarily compile forecast and planned data previously reported in past GNA and DUPR filings for the 2019–2026 period.

## 7.4 Confidential Treatment of Equity Metrics Input Data

In AL 5498-E et al., the Joint Utilities identified existing confidential GNA and DUPR appendices as example reporting locations for the proposed metrics data (e.g., the GNA Bank and Feeder appendix and the DUPR Planned Investment appendix), while providing that regression results would be included in the public narrative document. Because this Resolution instead requires submission of equity metrics input data through a new, dedicated GNA appendix and new DUPR fields, the Commission clarifies the confidential treatment applicable to these submissions.

The equity metrics input data required by this Resolution shall be subject to the same confidentiality framework that governs the IOUs' GNA and DUPR filings generally, including Public Utilities Code Section 583, General Order 66-D, and the 15/15 Rule adopted in Ordering Paragraph 31 of D.24-10-030 for data redaction protecting individual customer privacy in the ICA, GNA, and DUPR. Accordingly, IOUs shall submit two versions of the *Equity Metrics Statistics Appendices* and the equity-related fields added to the GNA and DUPR: (1) a complete, unredacted version submitted confidentially to Energy Division; and (2) a public version in which only those fields that would reveal customer-specific information are redacted. IOUs shall support any redaction in the public version consistent with applicable Commission rules. This approach ensures that Energy Division has access to the complete dataset necessary to develop and validate the econometric models, while preserving public access to the underlying data itself to the maximum extent consistent with customer privacy. The Commission finds this treatment appropriate because circuit-level enrollment data for programs such as CARE, FERA, Medical Baseline and Tribal designations could, on circuits serving small numbers of customers, potentially disclose the enrollment status of individual customers. The Commission notes that not all required fields implicate customer privacy; for example, the percentage of customers located within a DAC-designated (SB 535) census tract derives from publicly available designations, and such fields shall remain unredacted in the public version.

Confidential treatment of the input data does not diminish the public transparency of the equity metrics framework. The annual 'Equity Metrics in DPEP Report' shall present aggregated model results, including estimated coefficients, standard errors, statistical significance, model diagnostics, and narrative interpretation, and will not contain customer-identifiable information. Energy Division shall publish the annual 'Equity Metrics in DPEP Report' without confidential designations. This structure is consistent with the reporting approach described in AL 5498-E et al., which placed underlying data in confidential appendices while presenting regression results publicly,

and it preserves the Report's role as the public vehicle for evaluating equity outcomes in the DPEP, consistent with Section 6.2 of this Resolution. Confidential input data shall remain available to Commission staff for purposes of model development, validation, and reporting.

### **COMMENTS**

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the Commission's website and in accordance with any instructions accompanying the notice. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on August 12, 2026.

On September 1, 2026, the joint IOUs (Pacific Gas and Electric - PG&E, Southern California Edison - SCE, San Diego Gas and Electric - SDG&E) and Center for Accessible Technology (CforAT) filed timely comments on this resolution. Two parties also filed reply comments on September 9, 2026: SDG&E and PG&E.

The Joint IOUs object to the regression model approach perceiving it as exceeding scope and deviating from the collaborative framework mandated in D.24-10-030. The IOUs request formal utility technical review before publication of the official "Equity Metrics in DPEP Report." Commission declines the proposed modification. The IOUs proposed the regression models in the original filing of the Tier 3 Advice Letter for Equity Metrics in March of 2025 and defended the approach in their respective reply comments in April of 2025. This resolution adopts this framework with technical refinements and standardized Energy Division implementation. A collaborative framework is already operational through regular consultative sessions.

The Joint IOUs request explicit adoption of Professor Duncan Callaway's definition of equitable access. The Commission adopts the Callaway definition to establish what equitable access means in distribution planning, as detailed in section 6.1 of this resolution. The commission clarifies that this definition does not modify the utility planning process, as equity metrics are evaluation tools and not planning criteria.

The Joint IOUs request a pre-publication utility technical review, explaining that utilities possess essential understanding of the data quality and system specifications. PG&E strengthens this position in their reply comments (September 9, 2026), requesting circulation of a draft report and validation opportunity before publication. Energy Division's ongoing coordination with utilities through data submission processes creates opportunity for continuous technical input and clarification. The Commission maintains the current structure which already provides sufficient opportunity for collaborative feedback.

The Utilities commented that Attachment A requires undefined, or unnecessary data fields and request field -by-field review. They contend that the October 16, 2026, submission deadline is infeasible because 2026-2027 DPEP data is unavailable until August of 2027 GNA/DUPR filings. SDG&E provides specific timeline proof in reply, demonstrating the reporting deadlines conflict with data availability. Energy Division has confirmed each variable has a data dictionary definition, and operational clarifications will be addressed through ongoing ED-IOU communication. The commission has revised the data submission timeline and modified it to align with the DPEP and GNA/DUPR cycles. These timeline revisions and phased data submission schedule have been added to the respective section (7.3 Reporting Timeline). The commission is adopting a phased data submission to address the IOUs' concerns on data compilation and collection processes.

Utilities argue that 2019-2025 historical data requires "reconstruction" which exceeds the established scope and requires unfeasible assumptions. SDG&E states in reply comments that model calibration should not require historical data. The Commission declines this position. Historical data is necessary to calibrate stable parameter estimates for the main variables and to validate the consistency and robustness of regression coefficients across multiple time periods. Multi-period data allows assessment of the time-series properties and stationarity of key variables. We also find the data requests to be reasonable within scope.

The Utilities claim the cost of implementing the Draft Resolution exceeds the original IOU proposal and the IOUs request authorization to recover incremental implementation costs. They IOUs argue that organizing and formatting the existing data for reporting in the Attachment A format will require substantial effort. The Commission believes the data requests are well within the normal scope of CPUC data requests and we deny the request for additional cost recovery authorization.

The Joint Utilities request enhanced confidentiality protections and tribal review prior to publication for Tribal customer data, citing cultural and privacy concerns. Standard confidentiality protections already apply to all customer populations through redaction, aggregation, or existing confidential protective orders, making separate Tribal confidentiality protections unnecessary. Energy Division and the Commission do not intend to publish confidential data for any population, including Tribal customers. Tribal data receives the same protection as all other equity-priority population data. Hence, this request is declined.

## **FINDINGS AND CONCLUSIONS**

1. On October 23, 2024, the Commission issued Decision (D.) 24-10-030 in R.21-06-017, requiring the Joint Utilities to include metrics to track and evaluate equity in distribution plan reporting and to hold a workshop to further explore equity metrics and correlated variables.
2. Ordering Paragraph 25 of D.24-10-030 identified five equity metrics for exploration: (1) CARE/FERA enrollment; (2) CalEnviroScreen 4.0 Priority Populations percentile; (3) DAC status; (4) Tribal community status; and (5) Medical Baseline enrollment.
3. Energy Division hosted the required Equity Metrics Workshop on January 21, 2025, at which the Joint Utilities presented their proposed metrics and explored the five OP 25 metrics as directed by the Decision.
4. On March 7, 2025, SCE, PG&E, and SDG&E jointly filed AL 5498-E et al. within the 45-day period required by OP 25, requesting approval of a final set of equity metrics to measure equity in distribution planning.
5. AL 5498-E et al. was timely protested on March 20, 2025, by Vote Solar/CBD, and on March 27, 2025, by the Joint CCAs and CforAT.
6. SCE, on behalf of itself, PG&E, and SDG&E, filed joint reply comments to all protests on April 4, 2025.
7. In AL 5498-E et al., PG&E and SCE jointly proposed two co-developed metrics, a 'Grid Access' metric and a 'Project Initiation' metric, using regression analysis with disaggregated customer-group counts (CARE, FERA, Medical Baseline, Tribal, and DAC) as inputs, while SDG&E separately proposed a 'Load Growth' metric and a 'Project Initiation' metric based on a binary DAC/non-DAC circuit classification using descriptive statistics. Both proposals differ from the five metrics identified in OP 25 of D.24-10-030.
8. OP 25 of D.24-10-030 directs the Joint Utilities to hold a workshop for further exploration of the five equity metrics and their correlated variables and does not mandate verbatim adoption of those metrics in the Tier 3 Advice Letter.

9. The Joint Utilities complied with the procedural requirements of OP 25 by holding the required workshop, considering the metrics indicated by the Commission, and submitting the required Tier 3 Advice Letter requesting approval of a final set of metrics within the mandated timeframe.
10. The Joint Utilities' proposed metrics, as submitted, do not fully preserve the granularity and specificity of the five OP 25 metrics and require modifications to ensure cross-utility comparability and fulfillment of annual equity evaluation requirements directed in Decision 24-10-030.
11. Cross-utility comparability requires a standardized definition of each equity-priority population and a consistent analytical methodology applied uniformly across all three IOUs.
12. The five equity metrics identified in OP 25 of D.24-10-030 and the metrics proposed by the Joint Utilities in AL 5498-E et al. together form the foundation for the equity metrics framework modified and adopted in this Resolution.
13. Each of the five equity-priority populations (CARE, FERA, Medical Baseline, Tribal, and DAC) is analytically distinct and shall be tracked and reported independently.
14. The DAC designation, based on census tract-level CalEnviroScreen 4.0 data under SB 535, is a geographically-defined classification that is conceptually and methodologically distinct from the program-based designations of CARE, FERA, Medical Baseline, and Tribal populations.
15. Adding program-enrolled customers outside a DAC census tract to the DAC customer count conflates two different types of equity designations and risks inflating population estimates and double-counting individual customers who belong to more than one group.
16. It is reasonable that the Medical Baseline customer group includes all customers enrolled in the Medical Baseline Program, as well as customers receiving an equivalent medical discount if enrolled in an opt-in rate that does not include tiers, consistent with OP 25 of D.24-10-030.
17. It is reasonable that the Commission adopts the following definition of equitable access in distribution planning, based on the January 2025 Equity Metrics workshop presentation: "Equitable access in distribution planning means that connection ability and time to wait for connection are independent of race, ethnicity, income, linguistic isolation, and other demographic criteria. Utilities must take measures to respond to a range of future DER and load adoption scenarios while building new capacity consistently across all customer populations, as needs arise; this does not mean that all customers have access to equal capacity for new load."
18. The definition of *Equity in Distribution Planning* adopted in this resolution does not modify the utility planning process, as equity metrics are evaluation tools and not planning criteria.

19. An Energy Division-led modeling framework best supports analytical consistency, cross-utility comparability, and transparency in the annual evaluation of equity in distribution planning.
20. The three econometric models adopted in this Resolution ("Load Growth" Multiple Linear Regression, "Available Headroom" Multiple Linear Regression, and "Project Initiation" Logistic Regression) provide a robust and consistent framework for evaluating equity across the five equity-priority populations and constitute a reasonable and appropriate methodology, consistent with the intent of D.24-10-030.
21. The econometric models adopted in this Resolution serve as screening tools to identify potential disparities in equity outcomes warranting further review, and model results are not standalone determinations of inequity.
22. A logistic regression model is more appropriate than a linear regression model for the "Project Initiation" metric because project initiation is a binary outcome and logistic regression produces more reliable probability estimates for such outcomes.
23. It is reasonable to require that 'Load Growth' and 'Available Headroom' reporting reflect forecasted figures, given that the purpose of the equity metrics in DPEP framework is to evaluate the distribution planning process and not operational or post-planning performance.
24. Because PG&E and SCE incorporate planned investments into their Year 5 headroom calculations, while SDG&E's methodology may differ, any methodological differences in headroom calculation should be clearly documented and considered when interpreting the model results.
25. It is reasonable to establish the required fields, definitions, and structure for circuit-level and project-level submissions through a standardized data template, attached to this Resolution as Attachment A, to ensure consistency and comparability of the data submitted by the three IOUs.
26. It is reasonable to authorize Energy Division to develop, implement, and annually report the results of the econometric models adopted in this Resolution; to modify the content requirements of the "Equity Metrics Statistics" appendices to the GNA and DUPR filings, including data fields, definitions, and structure specified in Attachment A; and to issue data requests to clarify, supplement, or refine IOU-submitted data in support of the annual modeling cycle.
27. Requiring IOUs to submit equity metrics input data as a separate appendix to their annual GNA filings, titled "Equity Metrics Statistics," and as part of their DUPR filings, is reasonable and consistent with the Commission's authority under D.24-10-030.
28. It is reasonable for the first submission of equity metrics input data to be submitted in two phases: (1) the 2025-2026 GNA and DUPR data, filed on August 16, 2026, shall be reformatted and submitted in Attachment A format no later than October

- 16, 2026; and (2) historical equity metrics data for the period 2019 through 2025 shall be submitted in Attachment A format no later than December 31, 2026. This phased approach allows Energy Division sufficient time to develop, test, and validate the econometric models. Energy Division shall use this compiled dataset to prepare a Draft 'Equity Metrics in DPEP Report', expected in the third quarter of 2027.
29. It is likewise reasonable to require that the first official 'Equity Metrics in DPEP Report' be published in Q1 of 2028, taking as basis data from the 2026-2027 DPEP cycle. The 2026-2027 GNA and DUPR data, to be filed on August 16, 2027, shall be submitted in Attachment A format as part of the regular GNA/DUPR filings. In subsequent years, equity metrics input data shall be submitted as part of the IOUs' regular GNA and DUPR filings, on the same schedule as those filings, with results published annually in Q1 of the following calendar year.
30. The ICA maps and IOU data portals are designed to support DER siting and interconnection and are not the appropriate vehicle for communicating equity outcomes to the public and stakeholders. The annual 'Equity Metrics in DPEP Report,' to be published by Energy Division in the first quarter of each calendar year beginning in 2028, is the appropriate vehicle for publicly reporting equity outcomes in distribution planning.
31. Circuit-level enrollment data for programs such as CARE, FERA, and Medical Baseline could potentially, on circuits serving small numbers of customers, disclose confidential customer data.
32. It is reasonable to allow the IOUs to designate equity metrics input data submitted in the GNA Equity Metrics Statistics appendix and in the DUPR as confidential, to the extent the data would reveal customer-specific information, consistent with Public Utilities Code Section 583, General Order 66-D, and the 15/15 Rule adopted in Ordering Paragraph 31 of D.24-10-030. It is likewise reasonable to require the IOUs to serve, for each annual submission, both a complete unredacted confidential version of the equity metrics input data for Energy Division's use in model development, validation, and reporting, and a partially redacted public version submitted with the public GNA and DUPR filings, because this approach protects customer privacy while preserving public access to the non-confidential portions of the data. Publication of the annual 'Equity Metrics in DPEP Report,' which presents aggregated model results and contains no customer-identifiable information, does not disclose confidential information, and confidential treatment of input data therefore does not diminish the public transparency of the equity metrics framework.
33. This Resolution is consistent with Decision 24-10-030's direction for utilities to track and annually evaluate equity in distribution planning, enabling the Commission to

monitor how distribution planning investments and outcomes impact historically at-risk communities.

**THEREFORE, IT IS ORDERED THAT:**

1. Southern California Edison Company Advice Letter 5498-E, Pacific Gas and Electric Company Advice Letter 7530-E, and San Diego Gas & Electric Company Advice Letter 4617-E are approved with modifications as described in this Resolution.
2. The Investor-Owned Utilities shall incorporate the five equity-priority populations identified in Ordering Paragraph 25 of Decision 24-10-030: CARE enrollment, FERA enrollment, Medical Baseline enrollment, Tribal community status, and Disadvantaged Community (DAC) status based on CalEnviroScreen 4.0 under SB 535, to serve as independent variables in the equity metrics framework adopted in this Resolution and shall be tracked and reported independently.
3. Investor-Owned Utilities shall not combine, aggregate, or add any of the five equity-priority populations identified in Ordering Paragraph 25 of Decision 24-10-030 with each other for purposes of the equity metrics framework adopted in this Resolution. In particular, the IOUs shall not combine or add to the counts of customers enrolled in CARE, FERA, or Medical Baseline programs, or customers who are residing on Tribal trust lands or located within a tribal community, any customers identified as Disadvantaged Communities based on census tract-level CalEnviroScreen 4.0 data under SB 535.
4. Investor-Owned Utilities shall identify in the Medical Baseline customer group all customers enrolled in the Medical Baseline Program, as well as customers receiving an equivalent medical discount if enrolled in an opt-in rate that does not include tiers, consistent with Ordering Paragraph 25 of Decision 24-10-030, for the purpose of the equity metrics framework adopted in this Resolution.
5. Energy Division shall develop and implement an econometric modeling framework consisting of three models for evaluating equity across the five equity-priority populations: (1) a "Load Growth" Multiple Linear Regression at the circuit level; (2) an "Available Headroom" Multiple Linear Regression at the circuit level; and (3) a "Project Initiation" Logistic Regression at the project level, or other statistically appropriate specifications selected by Energy Division, as described in the Discussion section of this Resolution.
6. Energy Division shall publish an annual "Equity Metrics in the Distribution Planning and Execution Process Report" presenting the results of the econometric models described in Ordering Paragraph 5, including estimated coefficients, standard errors, p-values, goodness-of-fit statistics, model diagnostics, and a

narrative summary of results and interpretation for all three Investor-Owned Utilities.

7. A draft Equity Metrics in the Distribution Planning and Execution Process Report shall be delivered in the third quarter of 2027 based on the October 16, 2026 and December 31, 2026 data submissions. The first official Equity Metrics in DPEP Report shall be published in the first quarter of 2028, reflecting data from the 2026-2027 DPEP cycle (2026-2027 GNA and DUPR filings submitted in August 16 of 2027). In subsequent years, the 'Equity Metrics in DPEP Report' shall be published in the first quarter of each calendar year, reflecting data from the prior year's Distribution Planning and Execution Process cycle.
8. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall submit equity metrics input data annually as a separate appendix to their Grid Needs Assessment (GNA) filing, and as part of their Distribution Upgrade Project Report (DUPR) filing, each titled "Equity Metric Statistics" in their respective submission of a circuit level and project level data, consistent with the data fields, definitions, and structure specified in Attachment A to this Resolution (circuit-level data in the Circuit\_Data tab for the GNA appendix; project-level data in the Project\_Data tab for the DUPR appendix). These appendices shall be additional to the existing material submitted in those filings.
9. Pursuant to Ordering Paragraph 8, the initial submission of equity metrics input data shall be executed in two phases: (1) The 2025-2056 GNA and DUPR data, shall be formatted and submitted in Attachment A format no later than October 16, 2026. (2) Historical equity metrics data filed in the GNA and DUPR (Previously DDOR) in the period 2019 through 2025 shall be submitted in Attachment A format no later than December 31, 2026. Both submissions shall reflect the data fields and structured specified in Attachment A to this Resolution, to the extent available, the forecasted data previously reported in past GNA and DUPR filings for the periods covered. This phased approach allows Energy Division to develop, test and validate the econometric models using both historical and recent GNA/DUPR data.
10. Starting with the 2026-2027 GNA/DUPR, and each subsequent year, equity metrics input data, consistent with Attachment A to this Resolution, shall be submitted on the same schedule as the Investor-Owned Utilities' regular Grid Needs Assessment (GNA) and Distribution Upgrade Project Report (DUPR) filings, covering the same reporting years and planning horizon as the GNA and DUPR filings it accompanies, such that the period covered advances each year with the annual distribution planning cycle.
11. For each annual submission, all forecasted and planned data pursuant to Ordering Paragraph 8 and the data fields specified in Attachment A shall reflect forecasted figures developed in the distribution planning cycle underlying the GNA and DUPR

filings with which the data are submitted. For example, the equity metrics input data accompanying an IOU's 2027 GNA filing shall reflect the circuit-level forecasted peak load, forecasted load growth, and Year 1 and Year 5 available headroom figures developed in the 2026–2027 planning cycle, and covering that cycle's forecast horizon. The initial submission is the sole exception, as it necessarily compiles forecast and planned data previously reported in past GNA and DUPR filings for the 2019–2026 period. This requirement is consistent with the purpose of the equity metrics framework, which is to evaluate the distribution planning process and not operational or post-planning performance.

12. For each annual submission, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall serve two versions of the equity metrics input data: (1) a complete, unredacted confidential version, submitted to Energy Division for purposes of model development, validation, and reporting; and (2) a public version, with confidential information redacted consistent with the designations supported under this Ordering Paragraph, submitted with the public GNA and DUPR filings. In the public version, the IOUs may redact equity metrics input data as confidential, to the extent the data would reveal customer-specific information protected under Public Utilities Code Section 8380, Civil Code Section 1798 et seq., or D.14-05-016, and shall support any such designation consistent with Public Utilities Code Section 583, General Order 66-D, and the 15/15 Rule adopted in Ordering Paragraph 31 of Decision 24-10-030. The annual Equity Metrics Report shall be published as an entirely public document and shall not contain any information designated as confidential under this Ordering Paragraph.
13. Energy Division is authorized to modify the content requirements of the "Equity Metrics Statistics" appendices to the GNA and DUPR filings, including the data fields, definitions, and structure specified in Attachment A to this Resolution, as needed to support the annual modeling cycle and the equity metrics framework adopted in this Resolution. Starting in 2027, Energy Division shall serve any modified version of Attachment A on the Investor-Owned Utilities and to the service list of this proceeding (R.21-06-017) and any successor proceeding no later than 90 days before the applicable GNA or DUPR filing deadline. For the first submission of the "Equity Metrics Statistics" the IOUs must submit the data consistent with the final adopted Attachment A in the Resolution by October 16, 2026.
14. Energy Division is authorized to refine the econometric models described in Ordering Paragraph 5 as data quality and understanding of the equity metrics framework evolve over time and shall document any methodological updates in the annual 'Equity Metrics in DPEP Report.'

15. The Executive Director of Energy Division is authorized to adjust the reporting and publication cadence of the Equity Metrics in the Distribution Planning and Execution Process Report from annual to biannual or longer intervals, provided that the Executive Director documents the justification for such modification and provides notice to the Commission and service list prior to implementation.

This Resolution is effective today.

The foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on September 17, 2026; the following Commissioners voting favorably thereon:

/s/ LEUWAM TESFAI

Leuwam Tesfai  
Executive Director

JOHN REYNOLDS  
President

DARCIE L. HOUCK  
KAREN DOUGLAS  
MATTHEW BAKER  
CHRISTINE HARADA  
Commissioners

Dated September 17, 2026, at San Marcos, California