

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

Order Instituting Rulemaking to  
Develop Policy and Create a  
Consistent Regulatory Framework for  
Distributed Energy Resource  
Customer Programs.

Rulemaking \_\_\_\_\_

**ORDER INSTITUTING RULEMAKING TO DEVELOP POLICY AND CREATE A  
CONSISTENT REGULATORY FRAMEWORK FOR DISTRIBUTED ENERGY  
RESOURCE CUSTOMER PROGRAMS**

**Table of Contents**

<b>Title</b>	<b>Page</b>
ORDER INSTITUTING RULEMAKING TO DEVELOP POLICY AND CREATE A CONSISTENT REGULATORY FRAMEWORK FOR DISTRIBUTED ENERGY RESOURCE CUSTOMER PROGRAMS.....	- 1 -
1. Summary.....	- 2 -
2. Background .....	- 3 -
2.1. Overview.....	- 3 -
2.2. Legislative Background.....	- 5 -
2.3. Procedural Background. ....	- 7 -
2.4. Interagency Cooperation .....	- 10 -
3. Discussion.....	- 11 -
4. Preliminary Scoping Memo .....	- 30 -
4.1. Areas of Focus .....	- 33 -
4.2. Phases of this Order Instituting Rulemaking .....	- 34 -
4.3. Track 1: Developing a Consistent DER Framework .....	- 34 -
4.3.1. Task 1: Consistency of Metrics and Methods Across DERs.....	- 35 -
4.3.2. Task 2: Enacting Equipment Performance Standards and Requirements .....	- 37 -
4.3.3. Task 3: Performing a Programmatic Review of DER Customer Programs.....	- 38 -
4.3.4. Task 4: Coordinating Amongst DER Proceedings and with IRP ....	- 39 -
4.3.5. Track 1 Priorities for Phase 1 .....	- 40 -
4.3.6. Track 1 Questions for Parties.....	- 42 -
4.4. Track 2: Expanding the Use of Available Data.....	- 43 -
4.4.1. Details of Track 2.....	- 43 -
4.4.2. Track 2 Priorities for Phase 1 .....	- 47 -
4.4.3. Track 2 Questions for Parties.....	- 48 -
4.5. Track 3: Increasing Equity in DER Activities.....	- 48 -
4.5.1. Details of Track 3.....	- 49 -
4.5.2. Track 3 Priorities for Phase 1 .....	- 52 -
4.5.3. Track 3 Questions for Parties.....	- 53 -
5. Preliminary Schedule.....	- 54 -
6. Category of Proceeding and Need for Hearing .....	- 56 -
7. <i>Ex Parte</i> Communications .....	- 57 -
8. Respondents .....	- 57 -
9. Service List or Subscription Service.....	- 58 -
10. Public Advisor .....	- 60 -

11. Intervenor Compensation .....- 60 -  
ORDER.....- 61 -

## ORDER INSTITUTING RULEMAKING TO DEVELOP POLICY AND CREATE A CONSISTENT REGULATORY FRAMEWORK FOR DISTRIBUTED ENERGY RESOURCE CUSTOMER PROGRAMS

### 1. Summary

We open this rulemaking as a successor proceeding to Rulemaking (R.) 14-10-003 to develop and ensure consistent policy direction and review of behind-the-meter distributed energy resource (DER) programs, which we refer to as “customer programs.”<sup>1</sup> We envision this rulemaking as the procedural framework for pursuing the vision and carrying out the actions articulated in the customer programs track of the DER Action Plan recently adopted by the Commission, which states:

*The DER Action Plan’s Customer Programs Track focuses on improving coordination, planning and developing consistent metrics across DER proceedings related to customer programs to maximize their contributions to [greenhouse gas] (GHG) reductions and other state energy goals. The goal is to enable all customers to effectively manage their energy usage in a manner that ensures equitable participation and distribution of benefits, alignment with evolving rate design and load flexibility, alignment with distribution planning objectives, and alignment with integrated resource planning objectives<sup>2</sup>.*

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<sup>1</sup> Customer programs are programs offered to ratepayers by utilities, or other load-serving entities, that enable participants to manage their energy use by purchasing energy efficient or electric generation technologies, behavioral changes, or other activities that occur on the customer’s premises (often called “behind-the-meter”). They are often referred to as “demand-side management,” because they allow customers to manage their own demand for electricity or natural gas. They are often referred to as “distributed energy resources,” since the technologies used are small, modular devices that can be distributed throughout the electric grid or natural gas system, rather than centrally-stationed like most utility-scale generation (e.g., power plants). This proceeding will use “distributed energy resources” to refer behind-the-meter activities. However, we note that the term “distributed energy resources” is also used for small, distributed utility-scale generation.

<sup>2</sup> <https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division/der-action-plan>.

## 2. Background

### 2.1. Overview

The customer programs funded by ratepayers and authorized by the Commission are offered in accordance with California's energy policy directives, and enable participants to save energy, reduce GHG emissions, and lower their energy bills.<sup>3</sup> These programs have traditionally focused on procuring all available cost-effective demand reduction and energy efficiency resources before procuring traditional supply-side generation resources, and on procuring renewable energy resources before procuring fossil fuel resources.

Public Utilities Code Section 701.1(a) directs the Commission "to minimize the cost to society of the reliable energy services that are provided by natural gas and electricity, and to improve the environment and to encourage the diversity of energy sources through improvements in energy efficiency and renewable energy resources."<sup>4</sup> To fulfill these mandates, the Commission has, since the 1980s, directed the regulated electric and gas utilities to develop energy efficiency programs and, in the last two decades, program offerings have expanded to include many different DERs, including demand response, customer-sited generation and storage, smart grid technologies, and water-energy savings measures, as well as innovative rate design.

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<sup>3</sup> California's energy policies are directed by state law, such as Senate Bill (SB) 350, the Clean Energy and Pollution Reduction Act, which established clean energy, clean air, and greenhouse gas reduction goals. A good overview of California's energy policies can be found in the California Energy Commission's Integrated Energy Policy Report (IEPR). Highlights of the 2021 IEPR are available at [file:///C:/Users/jym/AppData/Local/Temp/MicrosoftEdgeDownloads/fb02428c-d7e1-4c5d-985b-becb6b0123c2/TN242559\\_20220405T105019\\_2021%20IEPR%20Highlights.pdf](file:///C:/Users/jym/AppData/Local/Temp/MicrosoftEdgeDownloads/fb02428c-d7e1-4c5d-985b-becb6b0123c2/TN242559_20220405T105019_2021%20IEPR%20Highlights.pdf).

<sup>4</sup> Hereafter, all references to code are to the Public Utilities Code unless otherwise indicated.

Rulemaking (R.) 14-10-003 was initiated in response to the increasing complexity resulting from this plethora of programs. R.14-10-003 focused on enabling DER providers to integrate their resources into utility procurement mechanisms and developing a framework that values DER technologies more consistently across resources. In 2016, the Commission established an Integrated Resource Planning (IRP) process in R.16-02-007. The IRP process is designed to guide electric utility planning, using capacity expansion and production cost modeling, to determine the least-cost path to achieving electric sector GHG reduction goals, while ensuring reliability. As of yet, DERs are not completely incorporated into IRP modeling as candidate resources.<sup>5</sup> Accomplishing this will require increasing coordination amongst the various DER resource proceedings and programs and the IRP proceeding. This proceeding will have a greater focus on electric utility planning than did R.14-10-003. It will also examine changes in the natural gas industry, as building decarbonization efforts and emerging technologies for renewable natural gas could portend significant changes that will impact DERs.

While the need to reduce GHG emissions is a leading driver of California's energy policies, other state policy objectives, such as increased grid reliability, safety, wildfire mitigation, benefits to disadvantaged communities, minimizing generation costs, and the need to limit rate increases, especially for low-income Californians, also play a significant role in shaping DER policies and programs. Recent state policy efforts include promoting the decarbonization of the building and transportation sectors, thus adding to the complexity of the DER landscape, and requiring the Commission to carefully coordinate our efforts in these areas.

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<sup>5</sup> Energy efficiency, residential photovoltaics (PV), certain demand response resources, and other DERs are included in the IRP via the demand forecast process.

This abundance of activities requires that we take another look at the way we prioritize, organize, plan, value, and measure the impact of DER programs, and whether those programs are successfully engaging with and providing solutions for ratepayers. It is necessary to examine these issues in a separate, standalone rulemaking, rather than within each DER-related proceeding. Establishing a separate, standalone rulemaking will allow the Commission to more effectively align efforts to reach our GHG, reliability, affordability and safety goals, by providing consistent guidance to energy efficiency, demand response, customer generation and storage, building decarbonization, transportation electrification, and other related proceedings. In addition, this rulemaking is intended to guide the energy utilities, as well as other non-utility program administrators and third parties, to improve their offerings of available technologies to enable each ratepayer to manage their energy usage, save money, and contribute to GHG reduction efforts. This rulemaking will seek to identify and reduce or eliminate existing barriers to providing customers with energy management solutions tailored to individual needs.

## **2.2. Legislative Background**

The Public Utilities Code grants the Commission broad authority over public utilities that provide electric and gas service in California. In particular, Section 701 states that:

*The [Commission] may supervise and regulate every public utility in the State and may do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction.*

The Public Utilities Code also provides substantial guidance as to how the Commission should use this authority. Section 701.1 states:

*(a) The Legislature finds and declares that, in addition to other ratepayer protection objectives, a principal goal of electric and*

*natural gas utilities' resource planning and investment shall be to minimize the cost to society of the reliable energy services that are provided by natural gas and electricity, and to improve the environment and to encourage the diversity of energy sources through improvements in [energy efficiency] and development of renewable energy resources, such as wind, solar, biomass, and geothermal energy.*

*(b) The Legislature further finds and declares that, in addition to any appropriate investments in energy production, electrical and natural gas utilities should seek to exploit all practicable and cost-effective conservation and improvements in the efficiency of energy use and distribution that offer equivalent or better system reliability, and which are not being exploited by any other entity.*

Senate Bill (SB) 32 (Pavley, 2016) updated Assembly Bill (AB) 32 by requiring that the state achieve a GHG emissions level 40 percent below the 1990 level by 2030 and required that we meet these goals in such a way that benefits the state's most disadvantaged communities.

SB 350 (de Leon, 2015) implemented several new policies and goals, including a doubling of energy efficiency savings in electricity and natural gas end uses by 2030, a requirement that large electric utilities develop and submit IRPs, requirements to support widespread transportation electrification, and a requirement that state agencies assess the barriers and make recommendations to increase access to energy efficiency, weatherization, and zero-emission technologies for low-income and disadvantaged communities. SB 100 (de Leon, 2018) sets a goal of meeting all retail electricity needs with renewable and zero-carbon resources by 2045 and updated the Renewables Portfolio Standard to require that at least 60 percent of retail sales of electricity come from renewable sources by 2030.

The California Legislature has also addressed building and transportation decarbonization efforts. SB 375 (Steinberg, 2008) sets regional emissions



reduction targets for passenger vehicles. SB 1477 (Stern, 2018) provides incentives for reducing GHG emissions in residential buildings and is designed to implement a market transition to clean technologies such as heat pumps. AB 3232 (Friedman, 2018) requires the state to assess the options for reducing GHG emissions from buildings by 2030, to 40 percent lower than 1990 levels.

Finally, the Public Utilities Code directs electrical corporations to first fulfill their unmet resource needs with energy efficiency and demand reduction programs. Section 454.5 (b)(9)(C) states:

*The electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.*

### **2.3. Procedural Background**

The Commission's efforts to coordinate customer programs started in 2005, when Decision (D.) 05-09-043 set forth a process to ensure expanded use of integrated programs and tracking of program implementation. D.05-09-043 approved utility proposals to include strategies to integrate energy efficiency with demand response and distributed generation to "determine the best combination of resources to meet the particular customer's needs," increase cost effectiveness, and avoid confusion to customers.<sup>6</sup>

The 2008 Long-Term Energy Efficiency Strategic Plan included a chapter dedicated to Integrated Demand Side Management (IDSMS) goals and objectives the utilities were to reference for program planning.<sup>7</sup> The Energy Efficiency

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<sup>6</sup> D.05-09-043 at 28, 71.

<sup>7</sup> California Public Utilities Commission (2008). California Long-Term Energy Efficiency Strategic Plan. Available at: <http://www.cpuc.ca.gov/NR/rdonlyres/D4321448-208C-48F9-9F62-1BBB14A8D717/0/EEStrategicPlan.pdf>.

Strategic Plan led subsequently to the initiation of a statewide utility IDSM Taskforce to advance statewide strategies for promoting IDSM through utility programs.

The Commission subsequently issued D.09-09-047, which established a statewide IDSM program and stated that this was “pivotal in promoting and achieving clearly defined goals and objectives for integrating demand-side technologies and program offerings across the utility portfolios.” D.09-09-047 identified eight tasks the utilities should accomplish in the 2010–2012 program cycle. In 2012, Commission Staff oversaw a third-party evaluation of the statewide IDSM program, which found that the program had limited success. This is discussed in more detail below.

Following these efforts to develop an “integrated demand-side management” strategy, the IDSM proceeding, R.14-10-003, was established. At its inception, the proceeding focused on integrating existing and emerging demand-side policies and activities.<sup>8</sup>

In 2015, the original scope of R.14-10-003 was altered, for reasons discussed below, to focus on the procurement of DERs that could potentially avoid costly distribution system upgrades, with the goal of improving the integration of DER resources into procurement processes. The name of the proceeding was changed to “Integrated Distributed Energy Resources,” or “IDER.”

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<sup>8</sup> R.14-10-003 *Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning and Evaluation of Integrated Demand Side Resources*. Available at <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=116116537>

This alteration resulted in two separate IDER tracks. A cost-effectiveness track focused on a four-phase plan to improve DER cost-effectiveness methods,<sup>9</sup> while a procurement track focused on developing a Competitive Solicitation Framework for DER pilot projects, project evaluation, and development of a standard contract and tariffs. These DER procurement issues have been absorbed into the *Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future* (High DER Future) proceeding (R.21-06-017).

The cost-effectiveness track resulted in several decisions that represent significant improvements in the DER cost-effectiveness process:

- D.16-06-007 requires the Commission's Energy Division to perform annual updates of the Avoided Cost Calculator (ACC), a modeling tool that is used to determine the benefits of DER programs, and to carry out a cost-effectiveness research project to assist with ACC updates, perform research on potential additional costs and benefits associated with DERs, and examine other research topics.
- D.19-05-019 refined the annual ACC update process by ordering minor updates to the ACC in odd-numbered years and major updates in even-numbered years. D.19-05-019 determined that the Total Resource Cost test should be the primary test of DER cost-effectiveness, but that the Program Administrator Cost test and the Ratepayer Impact Measure test should also be required in cost-effectiveness analyses, and that all three tests should be considered as part of any decision-making process that include cost-effectiveness analysis. D.19-05-019 also adopted a Societal Cost Test framework, to be tested in the IRP proceeding, and then re-examined after the testing period.

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<sup>9</sup> A summary of the cost-effectiveness plan is included in an October 9, 2015 ruling in the IDER proceeding. Available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M155/K042/155042870.PDF>.

- D.20-04-010 adopted a Staff Proposal to align the ACC with the IRP proceeding (R.16-02-007, followed by R.20-05-003) and the Distributed Resource Planning (DRP) proceeding (R.14-08-013). Outputs from IRP modeling, as well as information from the DRP proceeding, are now used as inputs to the ACC. In addition, D.20-04-010 adopted a new avoided cost of high global warming potential gases.
- D.22-05-002 adopted additional changes to the ACC by adopting a new avoided gas infrastructure cost and an interim natural gas GHG adder. D.22-05-022 eliminated the minor ACC updates, moving to a biennial update process. The decision also reinforced the link between the ACC and IRP, rejecting party proposals to use data inputs for the ACC that vary from those used in IRP modeling, and provided for improved transparency and increased stakeholder input of modeling results.

#### **2.4. Interagency Cooperation**

As the state of California undertakes work guided by SB 100 and related climate policies, the need for coordination and common direction among state agencies and California tribes is clear. For this reason, the Commission seeks active participation from the California Energy Commission (CEC), the California Air Resources Board (CARB), and California's Tribal governments towards the goals of this rulemaking.

The work contemplated here aligns with activities underway at both the CEC and the CARB. The Commission is already working with the CEC on several data projects, as we discuss below. Collaboration with the CEC throughout the course of the proceeding is anticipated to be particularly important for data-related issues discussed in Track 2. In addition, we look forward to continued work with the CEC on issues related to DER potential, valuation, and program management.

We also anticipate continued collaboration with CARB on Track 1 and Track 3 issues related to air pollution and carbon emission measurement, valuation, and mitigation. In coordination with Commission Staff, CEC and CARB reports may be circulated to the proceeding service list, and CEC and CARB Staff may present at proceeding workshops. Work related to this proceeding may include review of existing Memoranda of Understanding and non-disclosure agreements between these agencies in order to further streamline data sharing and analysis.

### **3. Discussion**

There are many ratepayer<sup>10</sup>-funded customer programs that promote the adoption of DERs within our energy efficiency, demand response, building decarbonization, net energy metering (NEM), and several other proceedings. These programs are funded, litigated, designed, administered, and implemented independently. While there is significant informal cross-program discussion among Staff and stakeholders who work on these programs, a formal coordination structure has not yet been developed. The IDSM program, discussed above, attempted to integrate these programs. However, of the eight integration-related tasks identified in D.09-09-047 for the utilities to accomplish in the 2010–2012 program cycle, most were not completed. The 2012 IDSM program evaluation<sup>11</sup> found that the program had limited success and noted that

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<sup>10</sup> In addition, the Commission oversees certain programs supported by cap and trade auction funds, state taxpayers fund, or other sources.

<sup>11</sup> A summary of the findings and recommendations of the 2012 IDSM program evaluation is available as Appendix A of the R.14-10-003 Order Instituting Rulemaking (OIR), available as of May 1, 2022 at:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M116/K116/116116537.PDF>.

“[t]he definition of IDSM is not concrete nor is it comprehensive,” and suggested that the Commission “provide the Utilities with a concise definition of IDSM.”

R.14-10-003 attempted to define integration through a series of workshops and rulings where parties were asked to define what integration means and what they believe the proceeding’s priorities should be. As a result, D.15-09-022 stated that the “integration of demand-side management is what the utilities and others offer to customers, and the integration of DERs is the collective action of customers, the [Commission], the utilities, the [California Independent System Operator] (CAISO), etc. to optimize DERs to the extent possible,” and defined the integration of DERs as

*A regulatory framework developed by the [Commission] to enable utility customers to effectively and efficiently choose from an array of distributed energy resources, taking into consideration the impact and interaction of such resources on the grid as a whole, the individual customer’s energy usage, and the environment.*

R.14-10-003’s focus moved away from the integration of demand-side management, or IDSM, and toward the integration of DERs, or IDER, and the proceeding’s name was changed accordingly. The new focus was on providing new opportunities for DER integration into the electric grid, in coordination with the DRP proceeding (R.14-08-013). This focus resulted in more procurement mechanisms and opportunities for DERs, and this work continues in the DRP successor proceeding, the High DER Future proceeding (R.21-06-017), as discussed above.

The policy issues originally scoped into R.14-10-003 related to integration of customer programs, except for cost-effectiveness, were left unaddressed. Since that time, the Commission has continued to oversee the development and expansion of customer programs. In fact, during the last few years there has

been increasing focus on new technologies, such as heat pumps and renewable fuels that can be used to decarbonize buildings, and large-scale development of a statewide electric vehicle charging infrastructure. This increase in activity compels us to take another look at the need for, and the meaning of, integrating these programs.

First, we examine some of the changes that have occurred in the last few years:

### **Climate Change Mitigation and Decarbonization**

California's energy goals, as discussed above in Section 2.2, are increasingly focused on climate change mitigation and ensuring that customer programs target traditionally underserved communities. While there are many customer programs that focus primarily on achieving energy savings and maintaining reliability, affordability, and safety, an increasing number of customer programs and other activities, such as integrated resource planning, have a major focus of achieving GHG reductions.

In addition, a major challenge is to achieve GHG reductions in a way that addresses equity. Underserved, low-income, and disadvantaged communities experience the impacts of climate change acutely. Given the increasing urgency of responding to the climate crisis, strategies to decarbonize the energy sector that promote equity and maintain reliability will continue to increase in importance.

### **Technological and Market Changes**

New technologies, such as high efficiency heat pumps and improved battery technologies, have altered many of our customer programs. For example, light-emitting diode (LED) lighting has replaced previous lighting technologies after many years of different energy efficiency programs promoting efficient

lighting and supporting adoption of minimum building standards. In addition, faster battery charging has enabled increased use of electric vehicles, and low-flow showerheads (which save both water and energy) are ubiquitous. The prices of many DER technologies, particularly solar photovoltaic (PV) panels and storage batteries, have decreased considerably.<sup>12</sup> Improved technologies for producing renewable natural gas and green hydrogen are emerging, and those natural gas alternatives are likely to decrease in price in the future.

### **Integrated Resource Planning**

Another important consideration is that, as mentioned above, Commission-jurisdictional electric utilities are now working in an IRP paradigm where capacity expansion is part of a statewide plan to meet load, maintain reliability, and reach GHG reduction and other state goals at the least possible cost. IRP modeling currently includes only a limited number of DERs as candidate resources for these capacity expansion plans, but in the future, more existing and emerging DERs are projected to be included in the planning model. However, there is currently no consistent mechanism for implementing the demand-side results of IRP modeling. Commission Staff have proposed a procurement framework<sup>13</sup> that will allow the Commission to order load-serving entities to procure certain resources needed for reliability, GHG reduction, or other goals. Additional consideration is needed, however, as to how to apply the proposed framework to demand-side resources suitable for this type of procurement.

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<sup>12</sup> According to the Solar Energy Industry Association the average (including both grid-scale and behind-the-meter) price of a solar photovoltaic system has dropped from \$5.39/Watt in 2010 to \$1.38 in 2021. Price data available as of June 6, 2022 at: <https://www.seia.org/solar-industry-research-data>

<sup>13</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M351/K577/351577337.PDF>.



### Increased Focus on Equity

Another important consideration is the Commission’s Environmental and Social Justice Action Plan (ESJ Action Plan),<sup>14</sup> which envisions an examination of how our programs impact disadvantaged communities, low-income Californians, and others identified in the ESJ Action Plan as “Environmental and Social Justice Communities (ESJ communities).”<sup>15</sup> Broadly speaking, we call programs with a primary focus on ESJ communities “equity programs.”

There are two primary challenges: (1) improve implementation of existing programs that target ESJ communities, and (2) better understand the impacts of all customer programs (and other DER-related activities) on ESJ communities.

There are currently several proceedings, programs, and pilot programs that enable or provide energy resources and services specifically for ESJ communities<sup>16</sup> (e.g., the Energy Savings Assistance (ESA) program , the Solar on

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<sup>14</sup> <https://www.cpuc.ca.gov/esjactionplan/>

<sup>15</sup> The ESJ Action Plan defines “ESJ communities” as those where residents are:

- Predominantly communities of color or low-income;
- Underrepresented in the policy setting or decision-making process;
- Subject to a disproportionate impact from one or more environmental hazards; and
- Likely to experience disparate implementation of environmental regulations and socioeconomic investments in their communities

<sup>16</sup> The ESJ Action Plan notes that targeted communities typically include but are not limited to:

- Disadvantaged communities located in the most environmentally burdened California census tracts, as determined by the 25 percent highest scores (75th percentile) when using the California Environmental Protection Agency's (Cal EPA) CalEnviroScreen tool [See here, as of May 31, 2022, for more on the CalEnviroScreen tool: <https://oehha.ca.gov/calenviroscreen>].
- All Tribal lands;
- Low-income households (Household incomes below 80 percent of the area median income); and

*Footnote continued on next page.*

Multifamily Affordable Housing program, the San Joaquin Valley Affordable Energy pilots, the Green Access Programs proceeding (A.22-05-022), and the Building Initiative for Low-emissions Development (BUILD) projects). However, there is no overarching strategy or plan for coordination amongst all the many DER proceedings. The lack of coordination at the proceeding level can filter down and make coordination of program management, program delivery, and customer access more difficult.

The CEC's 2016 Low-Income Barriers Study Part A<sup>17</sup> states that “[p]oor inter-program coordination results in funding silos and interjurisdictional overlap and conflicts, which result in unrealized potential energy upgrades.” The CEC study discusses the need for more coordination of all programs that target ESJ communities and identifies the need for a “one-stop shop” approach to enable target populations to easily understand all program opportunities available to them.<sup>18</sup>

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- Low-income census tracts (Census tracts where aggregated household incomes are less than 80 percent of area or state median income).

<sup>17</sup> See CEC, “Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities,” (2016). Available as of June 20, 2022 at: [https://assets.ctfassets.net/ntcn17ss1ow9/3SqKkJoNIvts2nYVPAOmGH/fe590149c3e39e51593231dc60eeeff/TN214830\\_20161215T184655\\_SB\\_350\\_LowIncome\\_Barriers\\_Study\\_Part\\_A\\_Co\\_mmission\\_Final\\_Report.pdf](https://assets.ctfassets.net/ntcn17ss1ow9/3SqKkJoNIvts2nYVPAOmGH/fe590149c3e39e51593231dc60eeeff/TN214830_20161215T184655_SB_350_LowIncome_Barriers_Study_Part_A_Co_mmission_Final_Report.pdf)

<sup>18</sup> Based on the CEC's 2016 Low-Income Barriers Study Part B, CARB developed a “one-stop shop” website, Access Clean California (<https://accesscleanca.org/>) to increase consumer awareness of and technical assistance for clean transportation incentives and programs, and eventually expand to additional transportation, energy, and housing programs targeting low-income residents. Additionally, D.21-06-015, regarding the Energy Savings Assistance (ESA) and California Alternate Rates for Energy programs, directed the IOUs to form a stakeholder working group to identify the purpose, goals, requirements, and intra- and interagency solutions or alternatives for a Universal Application System (UAS) that would allow a customer to apply for multiple program from a single platform. Programs addressed include the ESA, CARE, and the Family Electric Rate Assistance (FERA) programs as well as

*Footnote continued on next page.*

Through this proceeding, the Commission intends to elaborate an implementation strategy that will more efficiently and cost-effectively deliver services and technologies to low-income customers and potentially establish a basis for expanding coordination to other utilities (e.g., communications, water) and other state agencies. Therefore, this proceeding, in concert with the ESJ Action Plan and ongoing work in existing proceedings, will strive to adopt harmonized definitions and eligibility requirements to develop mutual eligibility between programs and streamline program delivery.

Some customer programs do not have a specific component that targets ESJ communities, yet these programs may still have significant impacts on ESJ Communities. For example, much of the policy debate regarding R.20-08-020, the *Rulemaking to Revisit Net Energy Metering Tariffs Pursuant to Decision 16-01-044, and to Address Other Issues Related to Net Energy Metering*, centers on the extent to which the benefits of the NEM program accrue to higher-income ratepayers, but the costs of the program are borne by all including, disproportionately, lower-income ratepayers. Hence, we will also develop guidelines for measuring the impacts, such as cost shifts, of customer programs on ESJ communities, as well as hard-to-reach, middle-income, and other relevant groups of ratepayers, when warranted.

Next, we examine ongoing issues identified in R.14-10-003 and other proceedings.

### **Inconsistency**

The Commission authorizes its energy efficiency, low-income energy efficiency, demand response, customer generation, building decarbonization,

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other low-income and clean energy programs (See D.21-06-015 Ordering Paragraphs 45 through 48).

and other DER customer programs in separate, siloed proceedings. Each proceeding develops its own process for budget approval, resulting in separate funding sources for each program. Each program has its own set of rules and requirements for who administers the program (e.g., utilities, third-party DER providers, community-based organizations); cost-effectiveness metrics; data collection; program evaluation, measurement and verification (EM&V); and marketing, education and outreach. Each program also has its own reporting tools and requirements, as well as models and methods for measuring program impacts, estimating cost-effectiveness, establishing potential and goals, and other quantitative needs. Use of more consistent metrics and models across these programs should result in significant administrative and opportunity cost savings, leading to an improved experience for participants and lower costs for ratepayers.

While these differences may be warranted due to different technologies (particularly in the case of electrification), target groups, or other characteristics, inconsistency across proceedings and resource-types can make it difficult to determine how best to apportion funds to the different activities and may also be a roadblock to full inclusion of DERs into IRP as candidate resources. In particular, these inconsistencies also make it difficult to combine similar or complementary programs, as there is no clear and consistent attribution process for measuring energy savings or other program goals. For example, for a combined energy efficiency and demand response program, it is difficult to attribute energy and capacity savings between the two components, since the processes for counting those savings may not address how to allocate interactive effects.

## Overlapping Programs

Having separate silos of demand-side activities can create overlaps in areas such as marketing and administration, resulting in duplicative costs and customer confusion. These overlaps can be geographic, so that implementers may not know if their customers are “double-dipping” into funds from another program, or that their customers may be eligible for more than one type of incentive. The overlaps can also be technological. For example, incentives for electric heat pump water heaters (HPWH) are offered through many programs, including building decarbonization, low-income assistance, wildfire recovery and mitigation planning, energy efficiency, and the Self-Generation Incentive Program (SGIP, R.20-05-012).<sup>19</sup> Sometimes the delivery mechanisms of similar programs overlap, especially programs requiring customer site visits. This is a common problem with programs targeting ESJ communities, since those programs generally focus on home improvements, but whenever multiple site visits occur to install different equipment at different times, the result is unnecessary expense and customer burden.

In the short-term, multiple programs offering incentives for the same technology, or requiring multiple site visits, can increase administrative and transaction costs, result in customer fatigue, and complicate program evaluation. In the longer-term, it can make it difficult to create new policy, analyze policy impacts, manage resources, or develop consistent strategies across proceedings.

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<sup>19</sup> Table 8 of D.22-04-036, at 48, lists 11 programs offering HPHW incentives as of December 2021. Decision available as of June 20, 2022 at: <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M467/K581/467581288.PDF>

### **Multiple Eligibility Requirements for ESJ Programs**

There are currently multiple definitions and criteria used to determine eligibility in ESJ programs. While many of these definitions are similar, there are slight nuances in them all, which is confusing for everyone, but most importantly, for the people these programs are intended to serve. For example, many equity programs are available to customers that are in the top 25 percent of the most-impacted communities, as identified by CalEnviroScreen. Some are available to customers that are in the top 25 percent of communities and the top five most pollution burdened communities as identified by CalEnviroScreen. Other programs are available to households that are at 200 percent of the Federal Poverty Limit (FPL). Some programs are available to populations that qualify under all three of the above eligibility criteria.

While some definitions and eligibility criteria are legislative directives or codified in law, many are created by the Commission and could be made more consistent across programs, so as to simplify eligibility verification and the application process. We recognize that there will be no one definition for ESJ communities that will suit every program or purpose, but this proceeding seeks to identify the elements of a definition for equity that allows us to help make the application process simpler and more consistent across programs, decrease administrative costs and increase both customer participation and satisfaction. This proceeding will also explore mutual or reciprocal eligibility for programs to further simplify application processes.

### **Separate Marketing, Education, and Outreach**

Each of our customer programs has its own marketing, education, and outreach budget, strategy, and implementers. Since each customer interaction can require significant time and resources, if these separate interactions do not

take advantage of resource synergies, it is likely that multiple marketing efforts are increasing overall costs, as well as both confusing and fatiguing customers. As a result, these competing messages may make it harder for customers to choose from the different demand-side resources available to them.

For example, this lack of coordination drives up marketing costs and leads to conflicting messaging (e.g., purchase energy efficient devices to permanently reduce energy usage vs. enroll in a demand response program and temporarily reduce as much energy usage as possible), customer confusion (e.g., deciding between an energy-efficient gas or an electric heat pump appliance), and increased transaction costs for both program implementers and their customers (e.g., filling out multiple forms to receive incentives from different programs for the same equipment, or to qualify for different ESJ programs).

### **Differing Goals**

Different customer programs have different goals and mandates, often defined by statute (e.g., energy savings, GHG reduction, equity, or market transformation), some of which are complementary, but some of which may conflict. For example, the mandate to obtain all cost-effective energy efficiency could conflict with the integrated resource planning goal to develop a least-cost path of capacity expansion, as an energy efficiency resource could be cost-effective but still more costly than another resource.

Coordination and consistency can be difficult to attain when programs have different goals. For example, traditionally, the primary goal of energy efficiency is energy reductions,<sup>20</sup> the primary goal of demand response is to reduce peak electric load, the primary goal of decarbonization programs is

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<sup>20</sup> While the traditional goal of energy efficiency programs was reducing energy consumption, it was changed in 2021 to a metric which includes both greenhouse gas and energy reductions.

reducing GHG emissions from energy usage in buildings or by vehicles, the primary goal of the ESA program is to provide equitable access to energy efficiency services, and the primary goals of customer generation programs vary by program. Some of these programs have secondary goals, such as increased resilience, increased reliability, or market transformation, and all of them have an inherent goal of contributing toward the provision of reliable energy services at reasonable rates, while protecting the health and safety of Californians.

Sometimes two programs have distinct goals that may sometimes compete. For example, energy efficiency provides incentives to customers to reduce energy usage by using more efficient processes or equipment. However, those same customers may then have less energy usage to shift during demand response events.

Other questions related to possible conflicting goals include the need to examine whether assessing resource potential individually results in sub-optimal procurement strategies. For example, resource-specific potential studies may determine the total amount of each resource that is feasible and cost-effective to obtain, but if the potential of the same technologies were modeled together, a different result would be likely.<sup>21</sup> In addition, different results are likely when designing a program, determining optimal program impacts, developing marketing strategies, and setting program incentives, depending on whether the program goals are focused on achieving energy or demand reductions, achieving GHG savings or maintaining reliability. At times, these different goals can be

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<sup>21</sup> The 2021 Energy Efficiency Potential and Goals Study included an analysis of the customer adoption impacts of integrating the co-benefits and costs of demand response and demand response-enabled energy efficiency technologies. For details see [2021 Energy Efficiency Potential and Goals Study – Attachment 4: Energy Efficiency-Demand Response Integration](#), available as of June 21, 2022.



useful, as different technologies or approaches may accomplish different things, but at other times different results can lead to redundancies and duplicative costs.

### **Lack of an Overall Market Transformation Strategy**

There has been much discussion and debate over many years about what constitutes a “Market Transformation” program. A 2014 Commission whitepaper on Market Transformation states

*Market Transformation interventions are designed to induce sustained increases in the adoption and penetration of energy efficient technologies and practices through structural changes in the market and in behaviors of market actors.<sup>22</sup>*

Various incentive programs have been successfully transforming markets in California for many years. For example, California’s utilities have administered incentive programs to support energy efficient lighting since the late 1980s. By the mid-2000s, the market share of all efficient screw-based lamps was twice as high in California as in other states.<sup>23</sup> Although there may be no official measurement of the cumulative net effects of California’s lighting programs, there is compelling evidence they were transformative to California’s lighting market.

Similarly, the California Solar Initiative (CSI), NEM tariffs, and the SGIP are generally credited for substantially accelerating the development of distributed generation markets in the state. That said, none of these programs were designed for specific market transformation goals. Thus, while the impact

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<sup>22</sup> *Building a Policy Framework to Support Energy Efficiency Market Transformation in California*. December 9, 2014, by Ralph Prael and Ken Keating, Consultants to Energy Division, California Public Utilities Commission. Edited by Cathleen Fogel and other Energy Division staff.

<sup>23</sup> California Residential Efficiency Market Share Tracking Study 2007, Itron Inc. [http://www.calmac.org/publications/CA\\_LampReport\\_2007.pdf](http://www.calmac.org/publications/CA_LampReport_2007.pdf).

of these programs includes many “spillover” effects, such as increased customer awareness, technology availability, and installer know-how, the overall market effects from the efforts are not well documented or directly credited to the efforts. This is in contrast to a market transformation-specific approach, in which targeted market barrier reductions lead to increased market penetration and transformation. Market transformation approaches also integrate specific data collection and evaluation components to measure market effects as a part of program design.

In general, market transformation initiatives are long-lived (approximately five to 10 years), begin in nascent markets, and end with a mature, self-sufficient market<sup>24</sup>. Market transformation initiatives are typically not cost-effective when they begin, as they require high levels of subsidization and multiple interventions to overcome the substantial barriers associated with nascent markets. As a market transformation initiative evolves, the market gains traction and begins to mature; the types of intervention strategies needed also evolve, and generally the level of subsidization tapers off as the market accelerates to its mature state. Thus, market transformation initiatives, when successful, are cost-effective over their full lifecycle.

Another key characteristic that differentiates market transformation interventions from other programs is that they are designed to address multiple barriers simultaneously through the deployment of multiple interventions. For

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<sup>24</sup> Market transformation may not be an appropriate goal for many low-income or ESJ-targeted assistance programs. The primary goal of many of these programs is not to transform a market but to ensure that all customers have access to clean, affordable energy. As a result, a mature, self-sufficient market may not be fully-achievable and reliance on program incentives and other subsidies over the longer-term may be a necessary and appropriate element of low-income or ESJ-targeted assistance program design.

example, a market transformation program may do all of the following, simultaneously:

- work with manufacturers to accelerate re-tooling or the array of products available;
- take steps to draw new players into a manufacturing space;
- offer incentives to distributors and retailers for stocking or selling the technology;
- offer training to contractors and customers to improve technology acceptance;
- conduct mass marketing campaigns to raise awareness;
- and, of course, offer incentives to customers to promote adoption.

Market transformation approaches are appropriate when the uptake of a new technology (or practice) faces multiple barriers, i.e., not simply a first-cost barrier, as is often the case in nascent markets. Due to their multi-pronged and long-lived nature, measuring the achievements of market transformation initiatives can be challenging. For this reason, careful upfront planning is needed to articulate the goals and milestones of a market transformation initiative, to ensure they are reasonable, measurable and well-defined. Ideally, there should be a comprehensive upfront plan that presents the research and rationale behind defined milestones and timelines. This both ensures adequate progress is being made along the way and offers a basis to measure the market-level accomplishments of the market transformation initiative.

Similarly, it is particularly critical that any ratepayer support provided to a market transformation initiative be accompanied by an exit strategy. Ongoing ratepayer funding for market transformation interventions can result in business models that become dependent on external support. For example, the CSI helped develop a robust market for rooftop solar PV installations using a

combination of incentives, marketing, and the first NEM tariff. CSI was strategic and effective in its use of incentives: equipment incentive levels were set at high levels at the start and were reduced over time according to a published schedule. This encouraged an acceleration of adoption, as customers were motivated to purchase while the incentives were still high. However, not all incentive programs or tariffs designed to promote market transformation have had clear exit strategies or planned end dates.

Early development of a market transformation plan that articulates goals, expectations, and timelines related to receiving ratepayer funds helps avoid long-term dependence on ratepayer support once the barriers to uptake are no longer present. These concepts are embodied in the Framework for Energy Efficiency Market Transformation adopted in D.19-12-021. This framework is designed to guide the development and implementation of market transformation initiatives focused on breaking down multiple market barriers identified for targeted technologies or practices. For reasons discussed above, the framework requires robust upfront planning, ongoing tracking, and an exit strategy for each market transformation initiative. The Commission is in the process of setting up a new, independent, third-party, statewide Market Transformation Administrator to manage the processes outlined in the framework within D.19-12-021. The Market Transformation Administrator is expected to be operational by early 2023. The Market Transformation Administrator will coordinate with other customer programs, such as Building Decarbonization, the energy efficiency Emerging Technologies Program, and Codes and Standards advocacy programs (C&S), to ensure coordination and avoid duplicative efforts.

### Legacy Organizational Structure

DER programs are traditionally categorized by type of “product” (e.g., “negawatts,”<sup>25</sup> dispatchable load, renewable generation) using distinct technologies or actions (e.g., efficient appliances, temporary load reductions, rooftop solar panels). To the extent that DERs are “products,” it is possible to effectively develop programs, markets, and other activities to increase the use of DERs, as we have been doing for many years. However, it is not clear if this type of categorization or the interventions designed around it still serves our needs.

Building decarbonization is a good example of why this system may be outdated, as it does not fit into our traditional resource categorization. In fact, it encompasses almost all of them. There are a variety of technologies and strategies available that can reduce direct carbon emissions in buildings, including alternative fuels to replace natural gas and electric appliances (such as heat pump space heaters, HPWH, and induction stoves) that replace natural gas devices. As a result, building decarbonization is a supply-side resource when we replace natural gas with renewable natural gas or other alternative fuels, but it is a type of energy efficiency when we can save energy through fuel substitution measures that replace natural gas appliances with electric appliances. HPWHs can function as storage devices, and provide demand response by shifting load from peak to off-peak hours. Because of this, incentives for HPWHs are offered within many different programs, as discussed above.

It may be more efficient to organize programs by function, particularly for valuation purposes (i.e., cost-effectiveness). For example, in D.21-05-031, the Commission approved restructuring energy efficiency programs into three

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<sup>25</sup> A negawatt is a unit of energy saved as a result of conservation or efficiency measures. This term was coined by environmentalist Amory Lovins in the 1980s.

segments: Resource Acquisition, Market Support and Equity.<sup>26</sup> Building on this, a broader possible categorization of programs across DERs could be:

- Resource Acquisition
- GHG Reduction
- Market Transformation
- Emerging Technology
- Equity
- Codes and Standards

This type of categorization could develop different cost-effectiveness frameworks for each program type. For example, market transformation and equity programs may have additional benefits that may not be found in resource acquisition programs. If these additional benefits cannot be completely quantified, or are quantified differently than resource acquisition programs, it might make sense to have different cost-effectiveness thresholds based on the primarily goal of or type of program, rather than thresholds based on the specific technology or some other factor.

### **Inaccessible or Underutilized Data**

Another area that requires our attention is the use of data from Smart Meters and other “smart” devices. A January 2020 American Council for an Energy Efficiency Economy (ACEEE) study finds that most utilities are not optimizing use of Smart Meters for saving energy, and that “[utilities] must actively engage their customers and offer them a range of services to support their energy saving investments and actions.”<sup>27</sup> In addition to Smart Meters,

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<sup>26</sup> See D.21-05-031 at 14 for definitions of these program segments.

<sup>27</sup> See Rachel Gold and Dan York, “Leveraging Advanced Metering Infrastructure to Save Energy” (2020). Available as of June 30, 2022 at: <https://www.aceee.org/research-report/u2001>

there are many “smart” devices, such as thermostats, solar inverters, grid-connected heat pump hot water heaters, and electric vehicle chargers that could provide data and help improve ratepayer programs. There is also a wealth of other data that is collected by utilities, government agencies and other sources.

While the Commission collects a significant amount of data from regulated entities, these data come in a variety of units and formats, which makes it challenging to cross-compare and analyze program impacts, share data with stakeholders, and ultimately measure and track progress on our programs. In addition, the amount and type of data collected vary across programs. This problem is especially acute for our equity programs, where the needed data can be harder to identify or collect, thus making it difficult to determine actual program impacts in ESJ Communities.

Consistent, accessible data requirements and reporting tools, clear guidelines for data access, and updated requirements for customer privacy could substantially expand the use of data to improve ratepayer access to programs that provide grid services and lower bills and improve Commission decision-making on rates and customer programs. While the Commission and the utilities we regulate have done considerable work in this area, as discussed below, this OIR seeks to improve upon and expand this work.

### **What does integration mean?**

The Commission has long sought to integrate DERs, but these efforts have been hampered by a lack of clear vision of what this means. Given the policy and technology challenges discussed in Section 3, we are now revisiting what it means to “integrate” our customer programs. A retrospective observation of Commission integration efforts over the past 10 or so years indicates that there are multiple definitions of what it means to integrate DERs, including:

1. Combining existing programs.
2. Maintaining separate programs but requiring that certain aspects of those programs (e.g., cost-effectiveness methods or eligibility criteria) be the same or similar.
3. Reorganizing programs, proceedings, and activities based on a different type of classification system than is currently used (e.g., organizing programs by resource, market transformation, etc., as discussed above).
4. Orienting energy markets and procurement mechanisms to integrate more DERs into the electric grid.

The IDSM program, as discussed above, had limited success, partially due to the lack of clarity about whether (and how) to combine programs, or to focus on combining certain aspects of programs, such as marketing. R.14-10-003 never clearly defined “integration,” and ultimately focused on one aspect of the second definition listed above (similar cost-effectiveness methods) and the fourth definition (energy markets and procurement mechanisms). While the proceeding achieved significant accomplishments in those areas, it did so without having a definition or clear vision of DER integration.

These experiences make us question whether it makes sense to try to define “integration” or even if we should be pursuing it. While it is hoped that this proceeding will help us refine the vision, we believe that it is more important to pursue concrete goals. Hence, rather than seeking to “integrate” DERs, we will seek to accomplish the vision set out in the DER Action Plan, Track 4, as stated in the Summary, Section 1 above.

#### **4. Preliminary Scoping Memo**

This rulemaking will be conducted in accordance with Article 6 of the Commission’s Rules of Practice and Procedure (Rules). Furthermore, as required by Rule 7.3, this order includes a preliminary scoping memo as set forth below.



This proceeding will serve as a mechanism for focusing on planning, organizing, and coordinating a cohesive DER implementation strategy. The Commission will review its DER programs and other activities to create a more comprehensive, sensible, and coordinated framework for carrying out demand-side activities. We anticipate this proceeding will be informed by other current or future proceedings at the Commission, including:

- Integrated Distributed Energy Resources (R.14-10-003)
- Transportation Electrification (R.18-12-006)
- Demand Response (Application [A.] 22-05-002 *et. al.*)
- Net Energy Metering (R.14-07-002 and R.20-08-020)
- Green Access Programs (A.22-05-022 *et. al.*)<sup>28</sup>
- Self-Generation Incentive Program (R.20-05-012)
- Energy Savings Assistance Program Budget Application (A.19-11-003)
- Energy Savings Assistance Program Budget Small and Multi-Jurisdictional Utilities' Application (A.20-03-014 *et. al.*)
- Affordability (R.18-07-006)
- San Joaquin Valley (R.15-03-010)
- Energy Efficiency (R.13-11-005)
- Energy Efficiency Business Plan Applications (A.22-02-005, *et al.*)
- Building Decarbonization (R.19-01-011)
- Integrated Resource Planning (R.16-02-007)
- High DER Future (R.21-06-17)

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<sup>28</sup> Consolidated applications of PG&E, SDG&E, and SCE for Review of the Disadvantaged Communities Green Tariff (DAC-GT), Community Solar Green Tariff (CSGT), and Green Tariff Shared Renewables (GTSR) Programs.

- Demand Flexibility Through Electric Rates (Demand Flexibility) (R.22-07-005)
- Microgrids (R.19-09-009)
- Clean Energy Financing (R.20-08-022)
- Renewable Natural Gas (R.13-02-008)
- Long-term Gas Infrastructure (R.20-01-007)
- Demand Response Click-Through Mechanism Application (A.18-11-015 *et. al.*)
- Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions (R.18-12-005)

Many of the proceedings listed above are technology specific. This proceeding will be technology neutral, seeking to build a set of processes, guidelines, and a unified direction that will implement the most feasible, useful and cost-effective sources of energy, demand, or GHG reductions, to help achieve state goals and meet individual customer needs. This may result in a major shift in the Commission's demand-side management policy. Under this framework, the Commission may in the future direct modifications to be applied to programs overseen in the related proceedings listed above, and to unify policies, metrics, research, programs, or other activities, such as:

- Goals, potential studies, and other research;
- Cost-effectiveness methods;
- Funding and procurement levels and sources;
- Marketing, education, and outreach efforts;
- Workforce development issues;
- Evaluation, measurement, and verification;
- Data collection and public availability of that data;
- Use of DERs for Integrated Resource Planning; and
- Program planning, design, and implementation.

#### **4.1. Areas of Focus**

Based on the issues and trends described in Section 3 above, we have determined that this proceeding should examine policies related to DERs in three general areas of focus, each housed in a separate track:

##### Track 1: Developing a Consistent DER Framework

Many of the issues discussed in Section 3, such as inconsistency and overlapping programs, could be addressed with more consistent rules, methods, or guidelines across customer program-related proceedings. In addition, a more organized and consistent framework could improve capacity planning, reduce ratepayer costs, and ensure that programs and proceedings are carefully targeted so as to maximize customer adoption.

##### Track 2: Expanding the Use of Available Data

The amount of data (including location and performance of self-generation installations) that is available from advanced meters, smart appliances, and other devices and sources has increased astronomically in the last few decades. Additionally, our programs currently collect vast amounts of demographic data including engagement and interaction preferences, housing and building information as well as other non-energy data. However, these data could be used more extensively and strategically. For example, the value of using these data to help greenhouse gas emission reduction and program participation goals remains largely untapped. There has been limited use of customer energy consumption data to target customers or locations that are a good match with specific technologies or programs, or to improve program design, measurement and evaluation. Guidelines for, and goals for improvements in, data usage and management could improve customer adoption and program cost-effectiveness.

### Track 3: Increasing Equity Across DER Activities

There are many existing DER programs that focus on low-income customers or ESJ communities, as well as several programs for middle-income ratepayers. These programs have particular concerns that go beyond activities related to Track 1. For example, better defining program eligibility and streamlining the application process could increase customer participation in ESJ communities. In addition, DER-related activities more broadly, including program designs and incentives, rates and tariffs, planning, and procurement, can impact ESJ communities and low-income customers, but the Commission has not yet developed metrics or guidelines to determine the extent of those impacts, nor their costs or benefits.

A detailed description of these three areas of focus, as well as the potential activities and stakeholder questions associated with them, can be found below. We seek comment on these proposed new and continuing activities:

#### **4.2. Phases of this Order Instituting Rulemaking**

The work of this proceeding will occur in more than one phase and will incorporate the ongoing work of R.14-10-003. Phase 1 will take place during 2022 and 2023 and will focus on continuing the work already underway and gathering information to inform future work. A significant source of that information will come from party comment on this OIR, including the responses to the stakeholder questions listed below for each area of focus.

Phase 2 will commence sometime in 2023 or 2024. The Phase 1 and 2 activities for each of the three areas of focus are discussed below.

#### **4.3. Track 1: Developing a Consistent DER Framework**

The goal of this track is to establish a more consistent framework for valuing, planning, designing, evaluating, and organizing all the different

technologies, programs, and proceedings related to DER customer programs.

We aim to accomplish this with four tasks, which are detailed in the sections below:

1. Developing consistent metrics and methods across resources and proceedings;
2. Developing equipment performance standards and requirements;
3. Carrying out a programmatic review to provide more information about and implementation of potential organizational improvements and improved program coordination; and,
4. Improving coordination amongst resource proceedings and with the IRP proceeding to better account for the contribution customer programs can make to grid planning efforts.

#### **4.3.1. Task 1: Consistency of Metrics and Methods Across DERs**

One of the goals of R.14-10-003 was to make the metrics, methods, and models used to analyze and support DERs consistent across proceedings and technologies. Existing program metrics (e.g., cost-effectiveness), guidelines (e.g., evaluation protocols), and methods (e.g., modeling tools), remain disparate across DER proceedings. Resolving these inconsistencies requires continuing the existing cost-effectiveness work that we undertook in the IDER proceeding, as well as undertaking new efforts to identify and resolve conflicts, inconsistencies, and redundancies, as well as developing guidelines, rules, and procedures across DER programs. This task will focus on continuing and expanding efforts to achieve consistency of cost-effectiveness assessments and other metrics, including whether and how cost-effectiveness assessments are related to program approval, by carrying out the remaining

tasks in the cost-effectiveness plan adopted in R.14-10-003 and expanding that effort to other metrics and methods. This work may include:

- Continuing the ongoing cost-effectiveness research contract for supporting annual ACC updates, air quality research, and support for additional cost-effectiveness improvements.
- Improving the consistency of cost-effectiveness metrics, methods, and requirements across proceedings. This may include addressing the variation in cost-effectiveness requirements for different resources, e.g., that energy efficiency and demand response programs are required to perform *ex ante* cost-effectiveness for budget approval, whereas customer generation programs are required only to perform *ex post* cost-effectiveness as part of program evaluation.
- Considering additional costs, benefits, and other inputs, such as societal, market, and reliability impacts, and developing cost-effectiveness metrics for bundled technologies and emerging technologies.
- Incorporating uncertainty into cost-effectiveness models.
- Considering changes in metrics or methods, in addition to cost-effectiveness, that can be implemented to improve consistency across DER proceedings, technologies or programs. It is important to note that most changes of this kind are expected to result from the programmatic review (Task 3), but there may be some changes that can be made in the near term. For example, it might be possible to institute requirements for comprehensive program metrics and goals, data collection protocols, and evaluation processes in the near term.

#### **4.3.2. Task 2: Enacting Equipment Performance Standards and Requirements**

Equipment performance standards and requirements are needed to ensure that technology promoted and incentivized with ratepayer funds meets the long-term needs of the grid. Without these standards, ratepayer funds could be used to provide incentives for, or otherwise support, devices with limited or inferior capabilities, unreasonable restrictions on data use, proprietary software, limited access to communications, or other attributes that might unnecessarily limit their usefulness.

This proceeding will seek to develop guidelines and best practices to enable other proceedings and activities related to technology development and deployment to ensure that those activities are designed to meet grid needs. This is intended to enhance, not replace, efforts of resource proceedings and programs to develop specific standards for specific technologies. In this proceeding we intend to work with those proceedings to develop appropriate guidelines. We also intend to work with other DER-related proceedings and stakeholders to ensure that the guidelines developed are appropriate for the broad variety of technologies being employed by our programs.

For example, a performance standard for grid interaction could help ensure that devices such as thermostats and HPWH can reduce demand during peak hours in response to dynamic prices or a dispatch signal from the grid operator. Further, a performance standard could set a minimum target for the amount of peak hour load reduction required in return for the ratepayer-funded incentive. As another example, a requirement that contracts executed between customers and equipment providers have specific data access requirements

could help ensure customer privacy is protected and that data are available for evaluation purposes.

#### **4.3.3. Task 3: Performing a Programmatic Review of DER Customer Programs**

This task is expected to provide the information needed to determine if and how we could consolidate and reorganize customer programs so as to minimize costs and maximize ratepayer benefits. The objective of this review is to assess, categorize, and compare DER programs and recommend programmatic changes needed to achieve state goals, and in particular, to find the best strategy to overcome the barriers listed in Section 3 by determining if improved DER program organization could lead to eliminating wasteful costs and redundancies as well as improving ratepayer participation by:

- Improving processes related to DERs, including making those processes more consistent across resources, such as program impact metrics; reporting tools; and EM&V, including those specific to ESJ programs.
- Consolidating and coordinating program management and administration when possible, including rebate/incentive processing and customer acquisition, particularly for program administrators with multiple program offerings.
- Measuring interactive effects between technologies and developing metrics for bundled programs.
- Adopting integrated research and activities, such as multi-resource potential studies.
- Combining programs or proceedings.
- Re-examining the organization of DERs into programs based on technology type.
- Examining programs with market transformation elements to explore possible best practices for when subsidies are provided and ended.



- Examining existing statutes collectively to determine priorities and policies for DERs.

#### **4.3.4. Task 4: Coordinating Amongst DER Proceedings and with IRP**

IRP modeling currently includes most DERs as “baseline resources” (or demand-side load modifiers), which are resources that are assumed to provide a given capacity each year. A few DERs are included as “candidate resources,” which are resources for which modelers can adjust or increase the annual capacity, so as to achieve the optimal resource mix. Enlarging the pool of candidate resources to include more DERs would improve grid planning by ensuring that all resources, on both the supply and demand sides, are providing the optimal amount of capacity. An improved understanding of optimal capacity level of each DER would allow us to design and plan customer programs to provide the maximum benefit to ratepayers. Coordination amongst IRP and the various resource proceedings is essential, both to provide the resource-specific data needed for IRP modeling and to operationalize the resource plans developed.

For Task 4, this proceeding will improve or initiate coordination with other proceedings, to ensure that:

- Data on DER costs and implementation needed for IRP modeling are consistent across resources and take into account interactive effects.
- DER program design, planning, and valuation is informed by IRP modeling results, which guide the electric grid’s future capacity expansion.
- Data related to transmission and distribution system costs, new and emerging technologies, program impacts, and other relevant quantities are available for planning and program design purposes consistently across proceedings.

#### 4.3.5. Track 1 Priorities for Phase 1

In Phase 1 we will focus on Task 1, the cost-effectiveness work that is already underway, which includes annual updates to the ACC and ongoing research funded by D.16-06-007. Specifically, we propose to:

- **Continue regular updates to the Avoided Cost Calculator:** Considerable progress was made in R.14-10-003 to develop an ACC that uses data from and coordinates with modeling efforts such as integrated resource and distribution system planning. R.14-10-003 also determined a process, most recently in D.22-05-002, to perform regular updates to the ACC, and required that all DER programs use the same version of the ACC. This proceeding will continue performing biennial updates to the ACC, and will take on all ACC-related activities such as undertaking a study of transmission and distribution avoided costs and developing guiding principles for the ACC.
- **Determine whether to adopt a Societal Cost Test:** D.19-05-019 adopted, for testing purposes, a Societal Cost Test proposed by Staff. The testing process was performed in the IRP proceeding, which issued a *Societal Cost Test Impact Evaluation*.<sup>29</sup> This proceeding will determine, as required by D.19-05-019, whether to adopt the Societal Cost Test and, if adopted, how to best apply the results of the Societal Cost Test into the DER cost-effectiveness framework.
- **Determine how to best apply air quality research results:** As part of ongoing cost-effectiveness research, the research report *Quantifying the Air Quality Impacts of Decarbonization and Distributed Energy Programs in*

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<sup>29</sup> Societal Cost Test Impact Evaluation; Commission Staff Report on the Impact of a Societal Cost Test on Resource Procurement (January 2022), available as of May 31, 2022 at [https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2019-2020-irp-events-and-materials/societal\\_cost\\_test\\_impact\\_evaluation.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2019-2020-irp-events-and-materials/societal_cost_test_impact_evaluation.pdf).

*California*<sup>30</sup> was released in January 2022. This report estimates the value to Californians of improved air quality resulting from decreased use of fossil fuels in buildings, for electric power generation, and in vehicles. The primary purpose of this research was to provide values for use in testing the Societal Cost Test but the results may also have implications for future DER evaluation and cost-effectiveness.

- **Continue to improve the DER cost-effectiveness process:** This proceeding will continue the efforts of R.14-10-003 to make the cost-effectiveness process more accurate, and more consistent across customer programs. In Phase 1, we will issue a Staff proposal on cost-effectiveness consistency across resources that can form the basis of development for cost-effectiveness protocols that apply to all DERs.

During Phase 1 we will collect information in these task areas from stakeholders in the form of responses to the questions in this OIR, and based on the responses, determine how to prioritize future work. We also anticipate releasing one or more Staff proposals. In addition to carrying out the specific Task 1 activities listed above, we plan to initiate Task 3 by drafting an initial programmatic review plan to be carried out during Phase 2, and to coordinate with the IRP proceeding on Task 4, which is a priority because of the need to better incorporate DERs into electric grid planning.

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<sup>30</sup> Energy+Environmental Economics; Advanced Power & Energy Program, University of California Irvine, Quantifying the Air Quality Impacts of Decarbonization and Distributed Energy Programs in California: A sector-specific study of the potential air quality benefits of vehicle electrification, building electrification, energy efficiency, and other clean energy resources (January 2022), available as of May 31, 2022 at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2019-2020-irp-events-and-materials/quantifying-air-quality-impacts.pdf>

#### 4.3.6. Track 1 Questions for Potential Parties

Any potential parties are requested to file comments on this OIR that respond to the following questions related to Track 1:

1. R.14-10-003 focused on making cost-effectiveness methods more consistent across DERs. To accomplish this, D.16-06-007 adopted a universal ACC which is updated annually and required for use by all DER proceedings. What other aspects of cost-effectiveness should also be made more consistent across DERs, and which of those are priorities?
2. Should the Commission develop cost-effectiveness methods for emerging and bundled technologies? Which technologies, or combinations of technologies, should we prioritize, and what are the most important considerations?
3. Which other metrics, processes, methods, models, tools, reporting requirements or other activities should be made more consistent across resources, technologies, or proceedings? Which of these are priorities?
4. How important is it to better incorporate uncertainty into the cost-effectiveness framework? How could we do so?
5. What kind of performance standards and requirements should be enforced for equipment that receives ratepayer funding? For example,
  - a. Should recipients of devices that are ratepayer-funded be required to make their data available for research purposes?
  - b. Should ratepayer funding go to devices that require exclusive contracts between the participant and a third party?
  - c. What type of performance standards should we have for technologies such as inverters, heat pumps, or other devices, to enable participants to fully manage their load?

6. How important is it to fully incorporate DERs into the IRP process? What kinds of tools, data, models, or processes would we need? How can the resource proceedings best provide data to the IRP process, and how can they best use IRP output data?
7. What goals, research questions, and issues should a programmatic review of DER customer programs focus on?

#### **4.4. Track 2: Expanding the Use of Available Data**

The goal of Track 2 is to improve reporting, availability, privacy protections, and use of data, especially data from Smart Meters and other “smart” devices, to improve customer program design, operation, and adoption.

##### **4.4.1. Details of Track 2**

For Track 2, we propose to develop guidelines and regulations to ensure that for all data-related activities:

- a. Customer privacy is protected with appropriate security, and requirements and protocols are standardized across regulated entities.
  - Aggregation and anonymization protocols are regularly updated and maintained by appropriate testing procedures.
  - Clear cybersecurity requirements are regularly updated and are enforced for any entity having access to confidential data.
- b. Customer privacy protocols are not needlessly restrictive such that they limit access to data unnecessarily.
  - Program participants, administrators, third parties, and regulated entities are required to share their data for public interest research and other designated purposes.
- c. Public facing data portals are easy to use and accessible so that in the future customers can interact with their real-time energy use on user-friendly devices such as smartphones, enabling customers to participate in real-time pricing.
- d. Models and databases developed in Commission proceedings:

- Ensure use of a broad range of data sources including utility, state government, federal government, and industry sources (to the extent appropriate to the proceeding);
  - Include a broad range of geographically-specific information including customer energy usage, energy program information, demographic, and census data (to the extent appropriate to the proceeding); and
  - Lead to tools designed to be consistent with those developed by other state agencies, such as CalEnviroScreen, CEC building energy code software, and CARB GHG emissions modeling.
- e. Data collection and reporting tools are:
- Consistent across utilities, programs, and proceedings, especially for programs with similar goals; and
  - Standardized to ensure consistency and usability across programs, proceedings, and utility service territories, and with all authorized entities.

To accomplish these goals, we will work with other proceedings with existing or planned data projects, including:

- a. D.14-05-016, which was issued in the *Rulemaking to Consider Smart Grid Technologies Pursuant to Federal Legislation and on the Commission's own Motion to Actively Guide Policy in California's Development of a Smart Grid System* (Smart Grid proceeding, R.08-12-009), adopted guidelines for use of smart meter data. These guidelines, especially the “use cases” for data access, require updating and refinement.
- b. The energy efficiency proceeding (R.13-11-005), has done considerable work on the use of normalized metered energy consumption (NMEC) data for calculating savings and payment to implementers with more programs utilizing the NMEC rules developed in the proceeding. In addition, the pending statewide deployment of a database tool and website to be referred to as California’s Analysis Tool for Locational Energy Assessment (CATALENA) will enable users to view

and download aggregated electric and gas energy use profiles of a utility's service territory customers in cross cutting sectors including residential, commercial, public, industrial, and agricultural and is expected to be designed to cross-link with other information systems to produce energy use profiles that support targeted, effective energy efficiency strategies and programs, performance over time, and reliable analysis and reporting.

- c. Two large-scale data gathering projects are underway, both of which are coordinated efforts of the Commission and the CEC:
  - A CEC-led project is focused on customer Advanced Metering Infrastructure time-series data and energy billing data.<sup>31</sup>
  - A Commission-led project is focused on a wider range of energy data, including customer time-series, power flow, geospatial grid infrastructure; energy efficiency, and demand response, to support the High DER Future proceeding (R.21-06-017).
- d. We will examine work undertaken, and the lessons learned, in the CARE and ESA program proceedings. This includes past studies that created individual CARE customer reports that illustrate disaggregated household usage by end use over time. This effort was designed to segment CARE customers into groups that would benefit from Critical Peak Pricing (CPP), Time of Use (TOU) rates, load shifting or demand response program enrollment. PG&E has proposed to use the results of this project to extend and enhance the use of these load profiles with CARE and ESA customers to test the impact of the personal profile information on driving energy savings,

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<sup>31</sup> The CEC collects statewide, electric and gas meter data pursuant to California Code of Regulations, Title 20, Section 1353, "Disaggregated Demand Data," which mandates energy consumption and associated billing and geographic data collection to fulfill legislative requirements for new and expanded analytic work.

residential rate selection, participation in other programs and changes in behavior.<sup>32</sup>

- e. The “Click-Through” mechanism is an online process that enables a customer to easily provide consent to their electric utility for release of customer data to a third-party demand response provider.<sup>33</sup> Delivery of accurate, timely customer data to third-parties and expansion of the Click-Through mechanism to other DERs could be considered.
- f. California Distributed Generation Statistics is a website that hosts publicly-available data on behind-the-meter interconnections in IOU service territories as well as data related to various customer generation and storage programs (e.g. SGIP, Solar on Multifamily Affordable Housing, Single-family Affordable Solar Homes, etc.). Since its creation in 2006, the website has continued to expand and is used by a wide range of stakeholders including government, academia, industry, and journalists.<sup>34</sup>
- g. Efforts underway in Demand Flexibility proceeding (R.22-07-005) to provide universal access to the current electricity price through a statewide internet-based price portal that provides the current composite electricity price specific to each customer at any time. This includes coordination with the CEC’s proposed amendments to their Load Management Standards, including updating the time dependent rates in the CEC’s Market Informed Demand Automation Server (MIDAS) database and implementing a single statewide standard method for providing automation service providers with access to customers’ rate information.

In addition, we will develop guidelines and propose requirements specific to data use to aid in Track 1 efforts to develop consistency across proceedings in

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<sup>32</sup> PG&E Testimony, A.19-11-03 *et al.*, November 4, 2019.

<sup>33</sup> See Application (A.) 18-11-015 *et al.*

<sup>34</sup> See <https://www.californiadgstats.ca.gov/>.



data collection, data reporting, and application to program design and marketing.

Planned activities for the instant rulemaking will not preclude other proceedings from making progress on data access issues.

#### **4.4.2. Track 2 Priorities for Phase 1**

During Phase 1, we propose to:

- a. Gather information, including stakeholder comment, on improving data sharing and use to establish data needs and identify barriers.
- b. Coordinate and share information amongst the existing data-related projects discussed above and discuss the extent to which these projects could and should be aligned.
- c. Based on information gathered above, institute plans to:
  - In coordination with CEC, update existing rules and requirements, following from D.14-05-016, for the release of smart meter data, and best practices for use of these data to improve customer adoption of DERs.
  - Consider whether smart devices, which are sometimes sold by companies that consider their data to be proprietary, should be subject to requirements for the release of data to receive incentives from ratepayer funds.
  - Coordinate with existing efforts to determine whether and how to use the real-time pricing portal under consideration in R.22-07-005 to support the integration of real-time price signals into customer programs.
  - Investigate the potential for integrating Commission-supported databases and tools with larger statewide initiatives, such as creation of a data “dictionary” to standardize the terms and units used in energy-related databases.<sup>35</sup>

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<sup>35</sup> See, for instance, <https://data.ca.gov/>.

#### **4.4.3. Track 2 Questions for Potential Parties**

Any potential parties are requested to file comments on this OIR that respond to the following questions related to Track 2:

1. How can the Commission, utilities, DER providers, and customers better use Smart Meter data? How can Smart Meter data help individual ratepayers, developers, and contractors determine which DER programs are likely to provide the most benefits?
2. What barriers (legal, regulatory, technological capacity, etc.) exist for load-serving entities and DER providers that prevent the greater use of energy consumption data to increase customer awareness and adoption of DERs?
3. To what extent should data collected by program administrators, or available from smart devices (including Smart Meters) be available to researchers for analytical purposes, such as evaluation, measurement, and verification?
4. To what extent should data collected by program administrators, or available from smart devices (including Smart Meters) be available to utilities, non-utility DER providers, and other energy providers or program administrators, for marketing, education, or outreach purposes?
5. Should smart devices, such as thermostats, solar and/or storage inverters, energy storage devices, grid-connected heat pump hot water heaters, and electric vehicle chargers, that are supported by ratepayer-funded incentive programs, be required to provide data for research purposes?
6. How can existing data reporting and data collection processes be improved to make them more consistent across resources and more accessible by users?

#### **4.5. Track 3: Increasing Equity in DER Activities**

The goal of Track 3 is to better coordinate energy programs that target, or have components that target, ESJ communities, as well as to better understand

and manage the impacts of all of our programs focusing on ESJ communities, low-income, hard-to-reach, middle income, and other relevant communities.

#### **4.5.1. Details of Track 3**

Many of the issues that Tracks 1 and 2 will focus on also pertain to Track 3. However, here are additional considerations and issues related to ESJ programs that require specific actions.

One goal of this proceeding is to streamline the application process for DER equity-related programs. This may mean creating standardized definition for ESJ communities, which can be used consistently across DER equity-related programs to streamline eligibility and simplify the application process. This may also mean establishing mutual eligibility for equity programs that are based on qualification for other public assistance programs.

Equity programs experience many of the same challenges and barriers as non-equity focused programs, but also have particular challenges of their own, such as ensuring access to capital and program awareness. Hence, one of Track 3's tasks will be to ensure that the programmatic review carried out as part of the Track 1 work is relevant and applicable to equity programs. Similarly, another Track 3 task will be to ensure that the data management work in Track 2 takes into account the realities and needs of equity programs. In particular, there is a need to develop and implement consistent metrics that can be used across programs for evaluation to track progress on advancing equity, and metrics that are more comprehensive and informative than simply recording money spent and physical placement of infrastructure in target communities. There is also a pressing need to institute mutual eligibility criteria across related programs and improve customer access tools to apply for programs.

Some work on this has already begun, so additional work in this new proceeding would seek to complement or expand such work. For example, the California Universal Telephone Service Program, or “California LifeLine” program, which provides discounts on phone services, offers mutual eligibility with a variety of public assistance programs including CalFresh, Supplemental Security Income, and National School Lunch Program.<sup>36</sup> The *Rulemaking to Consider New Approaches to Disconnections and Reconnections to Improve Energy Access and Contain Costs* (Disconnections proceeding) (R.18-07-005) is exploring allowing for mutual eligibility between the LifeLine and other public assistance programs.<sup>37</sup>

In D.21-06-015, regarding the ESA/CARE programs, the Commission directed the utilities to form a stakeholder working group to identify the purpose, goals, requirements, and intra- and interagency solutions or alternatives for a Universal Application System.<sup>38</sup> The working group found that a portal to allow a customer to apply for multiple programs from a single platform is beneficial and recommended continuing the effort to create one.<sup>39</sup> In R.13-11-005, the Commission defined an “Equity Segment.” Work to explore how target

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<sup>36</sup> For a list of programs that allow for mutual eligibility with the California LifeLine program, see here, available as of September 14, 2022: <https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/lifeline/california-lifeline-eligibility>. See also R.20-02-008, *Rulemaking to Update the California Universal Telephone Service (California LifeLine) Program*.

<sup>37</sup> <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=493760791>.

<sup>38</sup> Programs addressed include the ESA, CARE, and FERA program and other low-income and clean energy programs. See D.21-06-015 Ordering Paragraphs 45 through 48 in A.19-11-003 *et. al.*

<sup>39</sup> “Universal Application System Sub-Working Group Recommendation Report” (July 1, 2022) retrieved from: <https://pda.energydataweb.com/api/view/2626/UAS%20Recommendation%20Report%20%26%20Appendices%20Final%20Report.pdf>

populations within this segment are best defined for energy efficiency program purposes is ongoing in the Energy Efficiency Business Plan Application Proceeding (A.22-02-005).<sup>40</sup> Pending legislation such as SB 1208 (Hueso)<sup>41</sup> provides direction to address consistent eligibility criteria and a concurrent application process for multiple low-income assistance programs.

An additional goal is to develop and implement metrics and guidelines to enable the Commission to better understand the impact of all DER programs and activities (whether or not they are targeted, equity-related programs) on ESJ communities, as well as middle income ratepayers and other relevant groups.

In alignment and coordination with the Commission's ESJ Action Plan, and the DER Action Plan, and taking into account ongoing related work,<sup>42</sup> Track 3 of this OIR proposes to address the following tasks:

**Task 1:** Streamline the application process for DER and other energy programs that target ESJ communities.

**Task 2:** Apply the results of programmatic review (*see* Track 1) to improve programs that target ESJ communities.

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<sup>40</sup> D.21-05-031 at 14 - 15 defines "Equity Segment" as "[p]rograms with a primary purpose of providing energy efficiency to hard-to-reach or underserved customers and [disadvantaged communities] in advancement of the Commission's ESJ Action Plan," and states that "[i]mproving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan."

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF>

<sup>41</sup> Text of SB 1208 is available as of September 14, 2022 at [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=202120220SB1208](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1208).

<sup>42</sup> Including work in A.19-11-003 *et. al.* on the Universal Application System, discussed earlier, and work in A.22-02-005 to further define an "Equity Segment" for energy efficiency program purposes.

**Task 3:** Develop and implement metrics and guidelines to determine the impacts of all DER programs (including non-equity programs) on ESJ communities.

**Task 4:** Implement standardized data collection and reporting (in coordination with Track 2) across DER programs that target ESJ communities.

#### **4.5.2. Track 3 Priorities for Phase 1**

During Phase 1, this rulemaking will seek stakeholder input on how best to approach these issues by soliciting comment from relevant Staff, stakeholders, proceedings, and thought leaders on issues related to the full participation of ESJ communities in energy programs. This input will be used to develop a plan to refine and accomplish the tasks listed above, with the goal of completing them during Phase 1 by:

- Cataloguing the definitions and other eligibility criteria used for energy-related low-income, disadvantaged community, and other equity-related programs and proceedings, including Commission-jurisdictional as well as other state and federal programs.
- In coordination with the LifeLine program, the Disconnections proceeding, the Universal Application System work ongoing in ESA/CARE programs, “Deep Treatment Pilots” in the ESA proceeding,<sup>43</sup> and other programs, developing a framework for mutual eligibility between programs that have similar eligibility criteria, are seeking to expand access to similar technologies, or are targeting similar communities, with the goal of creating mutual eligibility or automatic enrollment amongst programs.

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<sup>43</sup> See D.21-06-015 at Attachment 2;

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M387/K458/387458900.pdf>

- Leveraging work by the LifeLine program and other programs to adopt mutual eligibility criteria with other public assistance programs.

In Phase 2, this rulemaking will develop guidelines, and possibly requirements, for improved inclusion of ESJ communities in DER programs. In addition, we will continue to find opportunities to coordinate and align program eligibility with other state agencies and, as appropriate, city or regional agencies. Such efforts may include assisting with efforts underway to consider, as a possible alternative to the Universal Application System, whether to include Commission programs in CARB's Access Clean California program, which attempts to streamline and improve access to clean energy and transportation-related incentives available to income-qualified customers,<sup>44</sup> and leveraging income-verified participant databases from other state programs, as discussed above, such as the California LifeLine program, CalFresh, and Low Income Energy Assistance Program (LIHEAP).<sup>45</sup>

#### **4.5.3. Track 3 Questions for Potential Parties**

Any potential parties are requested to file comments on this OIR that respond to the following questions related to Track 3:

1. What types of quantitative and qualitative data do we need to measure the impact on and benefits of DER programs for ESJ communities? Are we currently collecting those data? If not, what additional mechanisms do we need to do so? How can we develop consistent cost-effectiveness, evaluation, and other metrics across ESJ programs?

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<sup>44</sup> Access Clean California (formerly called One-Stop-Shop) was created to address a core recommendation of CARB's SB 350 Low-Income Barriers Study Part B. [https://www.arb.ca.gov/msprog/transoptions/sb350\\_final\\_guidance\\_document\\_022118.pdf](https://www.arb.ca.gov/msprog/transoptions/sb350_final_guidance_document_022118.pdf).

<sup>45</sup> For an overview of the LIHEAP program, see here, available as of September 14, 2022: <https://www.benefits.gov/benefit/623>.

2. How can we improve DER cost-effectiveness, evaluation, and other metrics for all DER programs so that they include the impacts to and concerns of ESJ communities?
3. Are there immediate opportunities for consolidation or improved program design of energy activities or programs that impact ESJ communities?
4. Are there immediate opportunities for mutual or reciprocal eligibility between ESJ-focused programs at the Commission with other state agencies, and other public assistance programs generally?
5. What are the components of or criteria for a standardized definition of equity be that can be used to create alignment and streamline eligibility among ESJ programs where eligibility is not set by statute?

### 5. Preliminary Schedule

The preliminary schedule for this proceeding is below. A schedule for each Track of this proceeding will be set forth in the Scoping Memo. Separate prehearing conferences may subsequently be conducted for each Track.

Event	Date
Comments on the OIR	45 days from issuance
Pre-hearing Conference	Q4 2022 - Q1 2023
Scoping Memo	Approximately 45 days after pre-hearing conference
<b>Track 1: Developing a Consistent DER Framework</b>	
Ruling requesting comments on Societal Cost Test and air quality research <sup>46</sup>	Concurrent with issuance of Scoping Memo

<sup>46</sup> These documents were released previously in R.14-10-003. See footnotes 28 and 29 above.



Ruling issuing and requesting comments on Staff Proposal on improvements to the cost-effectiveness process across DER programs	Q1 2023
Workshops as needed	TBD
Proposed Decision on Societal Cost Test, air quality research, and improvements to the cost-effectiveness process across DER programs	Q4 2023
2024 ACC update process: <sup>47</sup> Issuance of Staff ACC Proposal Workshop Discovery completed Opening Testimony Reply Testimony Evidentiary Hearing (if needed) Opening briefs Reply briefs Release of data from IRP proceeding Proposed decision issued Issuance of draft calculator Workshop Informal comments	July 2023 August 2023 September 2023 October 2023 November 2023 January 2024 February 2024 March 2024 60 days after adoption of a preferred system plan ≤ 90 days (after submission of briefs) Six weeks prior to issuance of draft resolution Approximately two weeks later Approximately two weeks later

<sup>47</sup> See D.22-05-002 for greater detail on biannual ACC schedules.

Issuance of draft resolution adopting updated ACC	Approximately two weeks later
<b>Track 2: Expanding the Use of Available Data</b>	
Ruling establishing data working group to produce report and a proposal on rules for: <ul style="list-style-type: none"> <li>• Data sharing and access</li> <li>• Data privacy and security</li> <li>• Smart meter/device requirements</li> <li>• Best practices for increased adoption</li> </ul>	Q1 2023
<b>Track 3: Increasing Equity in DER Activities</b>	
Ruling(s) Issuing Staff work products, including: <ul style="list-style-type: none"> <li>• Catalog of equity eligibility requirements</li> <li>• Proposal for new eligibility framework and/or universal application addressing reciprocal / mutual eligibility</li> <li>• Proposal for assessing equity impacts across programs</li> </ul>	Q2 2023  Q4 2023  Q1 2024

## 6. Category of Proceeding and Need for Hearing

The Commission's Rules require that an OIR preliminarily determine the category of the proceeding and the need for hearing.<sup>48</sup> As a preliminary matter, we determine that this proceeding is categorized as ratesetting, because Phase 1 of this proceeding will consider ACC values that may directly impact ratepayer costs and rates. Later phases of this proceeding may be appropriately considered as quasi-legislative as they would establish policy or rules affecting a

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<sup>48</sup> Rule 7.1(a).

class of regulated utilities, primarily the electric utilities. The assigned Commissioner will consider the need to recategorize this proceeding upon commencement of later phases.

We are also required to preliminarily determine if hearings are necessary. We preliminarily determine that hearings may be necessary on issues related to the ACC.

Any person who objects to the preliminary categorization of this Rulemaking or to the preliminary hearing determination shall state their objections in comments on the OIR. After considering the comments, the assigned commissioner will issue a scoping memo making a final category determination; this final category determination is subject to appeal as specified in Rule 7.6.

#### **7. *Ex Parte* Communications**

This proceeding is preliminarily characterized as ratesetting. Accordingly, *ex parte* communications are restricted and must be reported pursuant to Article 8 of the Commission's Rules.

#### **8. Respondents**

The electric utilities that offer DER programs are made respondents and, thereby, parties to this rulemaking (*See* Rule 1.4(d).) The following Commission-jurisdictional large electric utilities shall be the primary respondents to this proceeding: Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company. We include Southern California Gas Company as a respondent to this rulemaking as it implements a number of DER programs, including the ESA/CARE programs and SGIP.

Within 15 days of mailing of this Rulemaking, each respondent shall inform the Commission's Process Office of the contact information for a single representative.

### **9. Service List or Subscription Service**

This OIR will be served on respondents and on the service lists indicated below. Service of the OIR does not confer party status or place any person who has received such service on the official service list for this proceeding, other than respondents. Persons who file responsive comments become parties to the proceeding and will be added to the "Parties" category of the official service list upon such filing.<sup>49</sup>

This OIR will be served on the Official Service Lists for the following proceedings:

- Integrated Distributed Energy Resources (R.14-10-003)
- Transportation Electrification (R.18-12-006)
- Demand Response (Application [A.] 22-05-002 *et. al.*)
- Net Energy Metering (R.14-07-002 and R.20-08-020)
- Green Access Programs (A.22-05-022 *et. al.*)
- Self-Generation Incentive Program (R.20-05-012)
- Energy Savings Assistance Program Budget Application (A.19-11-003 *et. al.*)
- Energy Savings Assistance Program Budget Small and Multi-Jurisdictional Utilities' Application (A.20-03-014 *et. al.*)
- Affordability (R.18-07-006)
- San Joaquin Valley (R.15-03-010)

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<sup>49</sup> Rule 1.4(a)(2).

- Energy Efficiency (R.13-11-005)
- Energy Efficiency Business Plan Applications (A.22-02-005, *et. al.*)
- Building Decarbonization (R.19-01-011)
- Integrated Resource Planning (R.16-02-007)
- High DER Future (R.21-06-17)
- Demand Flexibility (R.22-07-005)
- Microgrids (R.19-09-009)
- Clean Energy Financing (R.20-08-022)
- Renewable Natural Gas (R.13-02-008)
- Long-term Gas Infrastructure (R.20-01-007)
- Demand Response Click-Through Mechanism Application (A.18-11-015 *et. al.*)
- Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions (R.18-12-005)

Additionally, this OIR shall be made available to the CEC and the CARB.

To assure service of comments and other documents and correspondence in advance of obtaining party status, persons should promptly request addition to the “Information Only” category as described below; they will be removed from that category upon obtaining party status. Any person will be added to the “Information Only” category of the official service list upon request, for electronic service of all documents in the proceeding, and should request to do so promptly in order to ensure timely service of comments and other documents and correspondence in the proceeding.<sup>50</sup> The request must be sent to the Process Office by e-mail ([process\\_office@cpuc.ca.gov](mailto:process_office@cpuc.ca.gov)) or letter (Process Office, California

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<sup>50</sup> Rule 1.9(f).

Public Utilities Commission, 505 Van Ness Avenue, San Francisco, California 94102). Please include the Docket Number of this rulemaking in the request.

With respect to subscription service, persons may monitor the proceeding by subscribing to receive electronic copies of documents in this proceeding that are published on the Commission's website. There is no need to be on the official service list in order to use the subscription service. Instructions for enrolling in the subscription service are available on the Commission's website at <http://subscribecpuc.cpuc.ca.gov/>.

Commission Rule 11.13(a) requires the filing of hard copies of documents. Due to ongoing COVID-19 restrictions, Commission Rule 11.13(a) is waived for this proceeding. All documents shall be filed electronically.

#### **10. Public Advisor**

Any person or entity interested in participating in this rulemaking who is unfamiliar with the Commission's procedures should contact the Commission's Public Advisor in San Francisco at (415) 703-2074 or 1-(866) 849-8390 or e-mail [public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov). The TTY number is 1-(866) 836-7825.

#### **11. Intervenor Compensation**

Intervenor Compensation is permitted in this proceeding. Any party that expects to claim intervenor compensation for its participation in this Rulemaking must file its notice of intent to claim intervenor compensation within 30 days of the filing of reply comments, except that notice may be filed within 30 days of a prehearing conference in the event that one is held. (*See* Rule 17.1(a)(2).)

Intervenor compensation rules are governed by Section 1801 et seq. of the Public Utilities Code. Parties new to participating in Commission proceedings may contact the Commission's Public Advisor.

**O R D E R****IT IS ORDERED** that:

1. This Order Instituting Rulemaking is adopted pursuant to Rule 6.1 of the Commission's Rules of Practice and Procedure and Public Utilities Code Sections 963(b)(3), 961(b)(1), 750, 321.1(a), and 451 with the goal of developing policy and creating a consistent regulatory framework for distributed energy resource customer programs.

2. The preliminary categorization is ratesetting.

3. The preliminary determination is that a hearing may be needed.

4. The preliminary scope of issues is as stated above in Section 4.

5. Comments on the Order Instituting Rulemaking as requested in sections 4.3.6, 4.4.3, and 4.5.3 are due 45 days from issuance of this Order Instituting Rulemaking. The schedule for the remainder of the proceeding will be adopted in the Assigned Commissioner's Scoping Memo.

6. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company are named as respondents to this Order Instituting Rulemaking.

7. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall, and any other person may, file comments responding to this Order Instituting Rulemaking no later than 45 days from its issuance.

8. The Executive Director will cause this Order Instituting Rulemaking to be served on all respondents, on the California Energy Commission and the California Air Resources Board, and on the service lists for the following Commission proceedings: Rulemaking (R.) 14-10-003, R.18-12-006, Application (A.) 22-05-002 *et. al.*, R.14-07-002, R.20-08-020, R.20-05-012, A.19-11-003 *et. al.*,

A.15-02-001 *et. al.*, R.18-07-006, R.15-03-010, A.20-03-014 *et. al.*, R.13-11-005, R.19-01-011, R.16-02-007, R.21-06-017, R.19-09-009, R.20-08-022, R.13-02-008, R.20-01-007, R.22-07-005, R.18-12-005, A.22-05-022 *et. al.*, and A.18-11-015 *et. al.*

9. Any party that expects to claim intervenor compensation for its participation in this Rulemaking must file its notice of intent to claim intervenor compensation within 30 days of the prehearing conference (*See* Rule 17.1(a)(2).)

10. Commission Rule 11.13(a) is waived for this proceeding; all documents shall be filed electronically.

11. This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.